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# ***JPRS Report***

## **Soviet Union**

### ***Economic Affairs***

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# Soviet Union

## Economic Affairs

JPRS-UEA-90-016

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## ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

### Economists See Market Reforms as Government's 'Last Chance'

#### LITERATURNAYA GAZETA Introduction

904A0336A Moscow LITERATURNAYA GAZETA in  
Russian No 18, 2 May 90 p 2

[LITERATURNAYA GAZETA introduction to articles  
by Vasilii Selyunin and Stanislav Shatalin under rubric:  
"Alternative—Challenge Made, Challenge Accepted!"]

[Text] In the past, LITERATURNAYA GAZETA has  
not shied away from [controversial] discussions and has  
frequently tried to get them started, to offer the strongest  
and boldest opponents the opportunity to cross swords  
in its pages so as to help to clarify the truth. Still less do  
we intend to shy away now, when challenges are being  
thrown up more and more frequently to the government,  
to the country's top leadership, from the pages of news-  
papers and leaflets and from the speaker's stand at  
rallies, when the outcome of discussions will be crucial  
not to the personal destinies of the debaters, but, without  
exaggeration, to the destiny of an immense country, of  
Europe, and of the world.

Under this permanent rubric called "Alternative," we  
intend to give the floor to representatives of the most  
serious economic alternatives—and, of course, to those  
who hold in their hands the unresponsive rudder of  
power.

#### Unpopular Measures Unavoidable

904A0336B Moscow LITERATURNAYA GAZETA in  
Russian No 18, 2 May 90 p 2

[Article by Vasilii Selyunin: "The Last Chance"]

[Text] I recall an exalted speaker who charged the same  
group of economists with two sins at the same time: first,  
while they criticized, they did not propose anything, and  
second, that they kept offering the speaker trifling ideas  
of no value. So, were they not proposing, but they were  
still offering? That is evidently the kind of man he was:  
He did not need anyone else's ideas unless they sup-  
ported his own. So, we will spell it out once again.

But first let us stipulate what we mean by a market  
economy. The steamed reformers sketch out for us a  
wonderful future: Just let us give enterprises indepen-  
dence, they will begin to work not for the plan, but for  
the consumer, there will be a scramble for the purchaser,  
competition, and we will have a sufficiency of all goods.  
No, we will not. A commodity market does not itself  
produce anything—all it does is to declare what kind of  
product is necessary, and it sends signals to another  
market—the stock market—where shares of stock are  
bought and sold. It is there, on the capital market, that  
the most important event takes place, the stock of the  
enterprises capable of making up the shortage goes up in

price. Thus, promising production groupings get an  
additional shot of capital, and with it all the necessary  
resources.

It is clear, however, that when a man buys stock, he is  
purchasing a part of the enterprise and becomes the  
private owner of that share (I use the word "private" for  
any property that is not public, that does not belong to  
the state). But even that is not enough. The money that  
is moving into the production grouping that suits the  
commodity market is useless unless it can be used to hire  
workers to expand the business. A market for labor, then,  
is also needed. And if a man is to freely sell his ability to  
work on that market, he must then be its owner. You see  
the kind of chain that is set up: You want to have a  
saturated commodity market, you set up markets for  
capital and labor, and this in turn necessitates privatiza-  
tion of property.

Purely technical procedures for degovernmentalization  
of the productive forces have been described repeatedly,  
even in my own articles, and they do not represent any  
particular problem. Just tell me what is unrealistic about  
offering to give, and still better to sell, land to everyone  
who has not lost the desire to work on it? And not only  
land—give the peasant the share of the kolkhoz's pro-  
ductive assets that he has created through his work so  
that the farmer does not begin farming from scratch.  
What obstacles are there to issuing to the workers of  
"Uralsmash" shares of stock in accordance with the work  
that each has contributed to the creation of that indus-  
trial giant—along with the right to sell them, give them  
away, leave them to their heirs, even eat it with their  
cereal? As soon as the treasury stops investing capital in  
it, during the life of one generation state property will  
give way to joint-stock property (private property). Why  
not allow wage labor, that is, introduce the labor market,  
immediately? What stands in the way of creating banks  
which at their own risk and peril would grant credits on  
commercial principles to those who start their own  
business as sole proprietors or a company?

A normal economy is unthinkable without a uniform  
currency as an equivalent of exchange. But in our  
country the price of every commodity is measured in  
terms of its own special ruble which is like a rubber tape  
measure. The domestic price of coal, say, is 18 rubles per  
ton, but the miners of the Kuzbass have sold fuel to  
Japan at \$75. The ruble used to put a value on that  
commodity, it turns out, is worth more than four times  
as much as the dollar. Yet in Munich I have seen the  
exchange offices give 6 cents for a ruble, and tourists  
buying panty hose, for example, like that rate of  
exchange. So how much is the ruble actually worth? We  
find that out as soon as prices are determined by the  
market, not by bureaucrats. Then, adoption of ruble  
convertibility becomes a simple technical operation.

The heart of the matter is not that the radical economists  
lack a clear program for the transition to the market. On  
the contrary, such a program has been worked out in  
sufficient detail; we know what measures have to be

carried out and in what sequence. But economists do not make the decisions. We can only sit by in powerless despair and watch the authorities go about the destruction of the domestic economy, as they lead the country to disaster, submitting one fantastic plan after another. The fateful decisions which took full effect in January 1988 ruined the consumer economy in the shortest possible time. No one dare say that we did not warn of the consequences of the government measures—the writing is there, read it. Fine, let bygones be bygones, let us think about what we are going to do now. We are not the first to have fallen into a predicament like this, and they have all made the same argument, some more stupidly than others: The disintegration of trade is when there is too much money and not enough goods; so let us restrict the payout of money and increase the output of goods—then they will get in balance with one another.

The government, of course, fell into that logical trap even though no one has ever yet restored health to a market in that way. We all remember the program of extraordinary measures composed last summer and fall. In NOVYY MIR, No 10, I made a flat prediction: These measures will not result in recovery of the economy, but in a rapid and sharp deterioration of the situation. Ah, how I wish my analysis had been wrong, that I had been deceived in my calculations! Well, the grass is always greener.... I have in front of me the statistical summary for January-February. In spite of the harsh restrictions, personal money income rose even faster than last year: it rose all of 14.8 percent. In spite of the stunning plans, the output of consumer goods increased quite modestly, and even that thanks to the rise of prices and cursed vodka. If we go on that way, income will rise 75-80 billion rubles for the year, and the additional growth for commodities will be about 25 billion. Another 50 billion "empty" rubles will be added to the money savings, which run to 500 billion.

Can you call this recovery of the market? You do not have to be Adam Smith to figure it out: If potatoes cost 4 rubles in the market, and meat costs 2 rubles in the store, then even if you double the production of meat, it will be bought up, and store shelves will be empty once again; when apartments are given out entirely for free, not only will you not solve the housing problem by the year 2000, you will not even solve it by the year 3000.

The government finally seems to have become aware of the failure of the recovery program and is ready to begin the transition to the market not somewhere after 1992, as L. Abalkin, member of the academy, has been planning, but immediately. The titles of some 3 dozen market-oriented new laws and decrees have been made public—the drafts are to be submitted for consideration by 1 May. It is with a certain satisfaction that I note in this list "trifling ideas of others" which we proposed long ago and whose rejection even yesterday was accompanied by abuse: concerning the freedom of economic activity and development of enterprise, concerning anti-monopoly measures, concerning shock therapy, and concerning markets for machines and equipment, for capital

and for labor. We are not interested in being first, just so the thing works. And now I again have doubts. In explaining the new program, M.S. Gorbachev stipulated: "...state ownership will continue to be predominant." In that case, just as there has been no market economy, so there will not be. A. Orlov, one of the custodians of the reform, has announced on behalf of the government: "Today, the average monthly wage of a worker is 240-260 rubles, that of a kolkhoz member about 200, and that of a cooperative member 500-800. Out of line! Which means that state regulation is required." This one idea is enough to block all innovations. And Orlov is willing to see rationing of goods in the future. A market with ration cards? This is so original it makes one want to cry.

Our great reformers are still dreaming of inventing something of their own that the world has never seen: A government decree proclaims the transition not to a market economy, but, you see, to a "planned-market economy." But combining planning and the market is like making a wristwatch with parts from an hourglass. Nothing happens except that you ruin both.

But let us assume that this time an absolutely correct package of documents has been prepared. Will the present government be able to carry out that plan? Hardly. It will not be easy. After all, difficult and unpopular decisions are required. Whether we like it or not, we have to remove restrictions from both retail and wholesale prices. And the forecast of V. Kirichenko, chairman of Goskomstat, seems extremely optimistic: He says that when pricing is done by the laws of the market, consumer goods will become some 40 percent more expensive. It is more likely that we will be counting not by how many tens of percentage points the new prices are higher, but by how many times they are higher. During the period of structural revamping of the economy for the sake of the market, unemployment is inevitable. The giving away of apartments without payment will have to be stopped, and gratis health care will have to be restricted. But now, just imagine, the government is declaring: Our party has been leading the country astray for 70 years, we ourselves have destroyed the economy during the years of perestroika, and so now we have become smarter and are again ready to lead you to a bright future through unemployment and inflation. You will agree that this does not seem very radiant, nor perfect. A political explosion and economic chaos are possible. But both are not simply possible, they are utterly inevitable if we postpone the hard choices once again.

In my view, an altogether different government would be capable of making them, not the present one. A government that would be entitled to say: That party has left us the country in a horrible state, and we have nothing to propose to you today except sweat and new troubles. The standard of living will fall. This cannot be avoided, it can only lighten our common burden. Under market conditions, for example, there is no need for subsidies to support low prices. About 90 billion rubles can be doled

out—above all to the poor. Since the socialist camp has disintegrated and the campers have dispersed, from now on we sell our goods abroad only at world prices and for real money, which will also make our burdens lighter.

That government could still retain control of events, as the Mazowiecki team has done in Poland. Under the previous government, at their rate of inflation the country surely would not have avoided strikes. In half a year, the "Solidarity" government has solved a simple, but important problem: the market is balanced, even though at a wild price level. The zloty has become convertible, even though it is not worth very much at present. The Poles seem to be bottoming out, there is a glimmer of stabilization.

We have been delaying with formation of a government of national confidence—tomorrow may be too late. In a recent television appearance, L. Abalkin, member of the academy, the author of the recovery program that has crashed, remarked: he said that they are ready to sit down at a round table, even a square table, with everyone who has sound ideas. Which means that we will express ideas, and he will sort them out: this one is fine, but not this one?

I have another proposal for the agenda of the hypothetical roundtable discussion: Let us discuss the procedure for turning power over to a new government. We would agree to a coalition at first. The present ministers of culture, foreign affairs, and environmental protection seem to be coping—let them remain in their positions. But turn over the defense department. After all, in Vilnius a zealous secretary called out the armed forces by telephone to share out the property of the party that had split apart. We intend to dissolve the political entities and party organizations in the armed forces—the present leadership is not doing that. We also get the Ministry of Internal Affairs—under you, it does not do a bad job of dispersing spontaneous rallies, but it does far less well in stopping crime. A professional police and also a professional army—outside politics. The KGB is not undergoing any kind of reorganization. Its chairman flatly declared the other day in the press: "...the party cannot stand aloof from the selection and assignment of people working in problematical areas of government activity, including those related to guaranteeing the security of the state and society." So what if it cannot, it is not necessary, it will have to create a state security service from scratch so that it does not serve the party, but the state and society. There have proven to be no other instruments for resolving interethnic conflicts in our country than angry manifestos and movements of tanks—here again, turn over full authority and it is self-evident that we form the brain trust for economic transformations.

This in the first approximation would be the agenda of the roundtable discussion. Are you ready to discuss it? Then see you later. We do not have the time to beat the empty air, we are beginning to form a shadow cabinet which will try to take over power when it slips from your

hands, but before it manages to plop into the mud. If we do not take it over, then it will be taken over by gangsters banded together to form a mafia, in a coalition with the rightwingers.

But who do I mean by "we"? I consider it simply unseemly to explain that I am thinking of my own self last of all. There are people, in recent years the country has had outstanding lawyers, brilliant economists, sensible politicians and parliamentarians. At this point, the social base is also ready for a government of national confidence—a general democratic and working class movement, strong democratic factions within local soviets, the progressive segment of the officer corps in the armed forces. The national liberation movements are our natural ally. One thing is missing—an organization which would provide the initiative for forming the new government. But a shrine does not stay empty. Something has to be done, and it will all happen.

### Concern Over 'Popular Impatience'

904A0336C Moscow LITERATURNAYA GAZETA in Russian No 18, 2 May 90 p 2

[Article by Stanislav Shatalin: "Let Us Not Lose Our Heads!"]

[Text] The recent decisions have been commensurate in their magnitude to the October Revolution. They have in any case marked a frontier from which a return to the command-administrative system became impossible. The old apparatus, which had provided at least some kind of management of the economy—perhaps it was bad, dictatorial, inefficient, destructive, but it still was management—that apparatus has for all practical purposes collapsed. We are still living in the world of the stagnation, of Stalinism, we should not harbor illusions in this respect, but the administrative-command system no longer exists as a system. It may seem paradoxical, but I am convinced that in our extremely politicized society it would be many times more difficult to go back to the administrative-command system than to advance toward an efficient market economy.

Of course, in the last 2 years our economy has not been moving so much toward the market as simply falling apart. The first months of 1990 showed that there have been no changes at all for the better and that there has been a deterioration in many respects. If things continue to go the same way, instead of the promised deficit in the state budget of 60 billion rubles, we will have a deficit of 85-90 billion. The statistics seem to detect a growth in the production of goods and services, but no one knows how large a component inflation is in this. And I cannot but agree with the extreme degree of alarm felt by Vasilii Selyunin because of the present state of our economy. But I will note something that he probably still did not know when he wrote the article: The country's leadership has adopted a decision to radicalize the reform. And this is not simply an economic decision. What can a member of the Presidential Council say: A political choice has been made.

On the whole, I like Selyunin's article. At the level of history, we probably do as a matter of fact face our last chance to get out of the rut onto the main road of civilization. There simply are no alternatives. Without private ownership in all its forms, without creating incentive mechanisms that are just as strong as in the West, we will not get the powerful engine of spontaneous development started.

But the impatience that is spreading in our society and the beating even being given to the processes of transition to the market economy are beginning to disturb me, who long has been a market supporter. Without creation of an infrastructure of the market type, without organizational and political structures, without developing a "market" culture, without carefully thought-through mechanisms for social protection of the population, without a transfer of real power to real soviets—without all of this, introduction of a hasty market by way of "shock therapy" would be (for all my immense respect for Selyunin) a great economic mistake. Perhaps as great as universal collectivization.

This does not mean at all that I am in favor of stretching the transition out over several years. A competent transition can be made in a year, in a matter of months, but it has to be done competently, with thought given to detail. If we simply undertake to declare "shock therapy," they will sweep us away tomorrow—be it Selyunin, Shatalin, Ryzhkov, it makes no difference. The USSR is not Poland. We are not one nationality (united what is more by a single church and with the immense authority of the Pope in Rome to boot), our government does not have confidence which it can use as credit, and so on.

But at the same time I cannot agree with the other extreme either, with the charging up of passions over the terrible misfortunes which are supposedly inevitable and which await us as we make the transition to the market—the scourge of unemployment, a monstrous rise of prices, a decline of consumption, and a drop of production. It is really interesting how our "rightwingers" and "leftwingers" join hands when it comes to these prophecies. But I do not consider these evils inevitable, since as a professional economist I see a number of ways of entirely avoiding essential complications (by comparison to the present crisis, of course). If we prepare a large reserve of consumer supplies, if we dump them onto the market at the right time, if we restrict "hot" money, if we issue stocks and bonds, if we raise interest rates, if we begin to sell land and at the same time provide real freedom for enterprise in all spheres, we will make the transition with practically no drop in the standard of living.

But we still are not ready for that. The law on property is bad, it prohibits real private ownership, it prohibits what is referred to as "exploitation"; it needs more work.

The land law is also bad, it does not solve the land problem in rural areas, nor does it allow a city dweller to buy land. Why? We refuse to index prices and income, but otherwise we will be unable to protect the interests of

the most diverse social groups in the upcoming transition—from pensioners, university students, and single mothers, who may be threatened with serious problems, to the worker "aristocracy" and scientists, who may simply head across the border in large numbers, leaving the nation without hands and brains. We have to prepare measures to protect the interests of all who could suffer from the rise of prices, from the change in the structure of employment, but what is the point in frightening one another with rates of inflation in the thousands and unemployment in the millions? This is not very sound thinking in my opinion.

What else would I like to emphasize in Selyunin's proposals? It is clear that state ownership is now utterly bankrupt. The problem lies elsewhere: How at this point can we institute privatization of everything that we have become accustomed to consider state property, which in essence was not anyone's? My esteemed friend evidently implies several simple methods. But will they prove to be so simple? Selyunin says, for example, "...when apartments are given out entirely for free, not only will you not solve the housing problem by the year 2000, you will not even solve it by the year 3000." But how are we to "stop giving away apartments without payment"? After all, it is precisely those who are not well-off and who have large families who are in need of housing, that is, those who manifestly are unable to invest 15,000 or 20,000 in an apartment. So no one who has money will live in a dormitory. But I do not know how to force him to pay for an apartment which is free, but to which he is entitled under the law. However, our housing problem is one of the most acute political problems, and we cannot simply make people a promise without serious calculations: so now we are putting the allocation of apartments on a paid basis and we will solve the problem.

And this is what Selyunin lacks, but which as a matter of fact is among the "last chances"—we must make a choice about foreign aid. Without large-scale aid from the West, we will not create an up-to-date market economy. Anyone who preaches autarky is deceiving our people. Anyone who says that that aid means that we are leading the country astray into collusion with the capitalists is also deceiving the people. Let me put it this way—we do not need philanthropy from the West (although there is no point in refusing selfless aid), we do need credits for consumer goods, we need to import capital, we need to import brains, we need to try to take from the West everything we can that has to do with the organization of the economy. In any normal state, people are only too happy when foreign capital comes into the country: new jobs, an inflow of foreign exchange, new goods on the domestic market. Yet we frighten ourselves that we are selling out the country, that we are giving up some kind of positions. If it is on "isms" that we want to feed the country, then those fears are justified, but if we want to have a surfeit of good food and at the same time clothes and shoes and in general to finally live like human beings.... Either "isms" or meat—you cannot have them both.

At the present time, the country's "creditworthiness" is declining in the West. Two or three years ago the situation was far more favorable for us; because of our internal instability, commercial banks are now simply hiking up their rates. The state banks, the federal banks, can furnish money, I will state it flatly, only if it is secured by Gorbachev, by real changes in the country. Some people are responding to that: What do they think, that we will organize according to someone's opinion over there? Again, this is idle. Either we want to raise up our economy and enter the world community and the International Monetary Fund and trade agreements as strong and honest partners, or we prefer our lowly place on the side of the road.

There are certain essential points in Selyunin's argument with which I cannot agree. For instance, reducing the payment of money which has not been earned and increasing the output of goods is by no means a stupid measure in restoring health to the market, but is even quite traditional. But issuing shares of stock "based on work" to the personnel of "Uralmash" seems to me a semifeudal measure, and does not resemble present-day market relations very much. In general, there are too many truisms in his arguments about the market, though even they are for the present only "models" for us.

And there is one other question on which we need to finally arrive at full clarity—social diversity: that which exists at present, which we camouflage in every way, and that which we will have in the future, which inevitably has to become more intense. Our society has been stratified for a long time, now it is time to honestly admit it and put everything in its place—to tell the people who earns how much and how people live. To explain that we do have social parasitism, dependency, leveling, which must be fought without mercy, but there is also a justified gap in income, which should be intensified so as to build up incentive mechanisms which have been destroyed.

As for an alternative to the country's present leadership, to the government, I see an essential logical lapse in Selyunin here. The assumption is that somewhere people already exist who know the precise formula for success and who possess all the data—the experience, the will, the authority, and so on, to force 15 republics, hundreds of nationalities, a multitude of religions, and in general almost 300 million individuals scattered over one-sixth of the globe to act according to that formula. Where are these outstanding people? Who are they? If they are parliamentarians, since they establish the government and monitor it, then there is no need for them to sit down at the roundtable with those whom they can call to account on any issue at any moment. If these are important economists who up to now have not been taking part either in the proceedings of the parliament or in the work of the government, then of what has their brilliance consisted? Sensible politicians and outstanding lawyers whom the country has recognized thanks to the broadcasting of the congresses, they are all involved already, and those whom the country still does

not know (who perhaps are less sensible and outstanding) can hardly make up a government of national confidence. Will they find the magic wand to solve, say, interethnic problems? And I really do not know whether it is worthwhile for a superb journalist to speak so angrily about the leading officials of the Ministry of Defense, the Ministry of Internal Affairs, the KGB. Is it not an oversimplification to see the malice of particular people in everything?

But that, of course, is not the main point. We have to call things by their names. If we express a lack of confidence in the government today, when the institution of presidential power is being established, we are on the verge of a lack of confidence in the president. When we take as allies the "national liberation movements," these are those factions in soviets, "progressive segments" of social groups, we are setting a clear course toward a split in our society and disintegration of the state and then we can forget about the economic reform. The struggle for power and the movement toward prosperity are incompatible, as the mathematicians say, by definition.

In this connection, I would like to emphasize in principle that the ideology of our radical democrats is correct, but it quite often gets carried away and tends to gush. Its thinking lacks thoroughness, judiciousness—the spirit of Milyukov, if you like. It sometimes also lacks a sober assessment of its own virtues and capabilities (here, it would be useful to compare its level to that of the professionals in the West). But to go back to the article of Vasilii Selyunin, this is the pain and outcry of a bold and honest and intelligent citizen who is deeply worried about the destiny of our country, a man whom I personally trust very much. We all, and above all the government, need to listen to his alarm, to understand it, and to draw conclusions. For the government, it really is the last chance.

### Workers Discuss Defense Plant's Economic Reform Efforts

904A0288A Moscow *VECHERNYAYA MOSKVA* in Russian 22 Mar 90 p 2

[Article by V. Savelyev: "The Reform By-passes Defense"]

[Text] Two workers—a communist and a non-party individual reflect upon life at a plant and throughout the country.

The questionnaire entitled "Your View of Perestroika" was published in the newspaper. Herewith the questions.

1. What changed in your brigade, department or enterprise? What new managerial forms (contract, lease, cooperatives, shares of stock) are being employed and what are the results?

2. In your opinion, what is restraining the economic reform—insufficient independence for the enterprises,



low competence and skills in the leaders, administrators and workers, or other factors?

3. Democratization and openness at the enterprise—are they sufficiently developed to the point where they allow a working individual to feel that he is protected? What has the election of leaders shown? What authority does the trade union and party committee have in your collective?

4. What is your personal participation in the socioeconomic processes taking place in society? How do you evaluate the activity of your labor collective? What is your recommendation for ensuring that perestroika is carried out in a more rapid and more effective manner?

The following answers are supplied by workers attached to the Rassvet Machine Building Plant—brigade leader Yuriy Fedorovich Sannikov and trouble-shooter Aleksandr Vasilyevich Chernetsov.

Information. Yu.F. Sannikov is 48 years old, a communist and he has been at the Rassvet Plant for 26 years. Until recently, he was chairman of the plant's STK [labor committee council]. His successor in this post is a non-party individual by the name of A.V. Chernetsov, who is 39 years of age and who has been at the plant for 14 years.

1. [Sannikov] To begin with, I believe that I should discuss briefly our Plant. Until recently, the Rassvet Plant was a closed enterprise and almost unknown in the city. In terms of equipment, it embodies modern production and has fine traditions. But our situation is completely dependent upon the ministry. We are operating on the basis of the very first cost accounting model. Only 21.5 percent of the profit remains for the collective. The norms are reviewed several times annually and clearly in favor of one side. In such a situation, we are earning today only slightly more than we were prior to the reform. Meanwhile, the intensity of the work is increasing in the departments, the plans are becoming more tense and the wage fund is the same as before.

I am aware that our leaders are discussing new ideas for progressive managerial forms, and in all probability some results will be realized.

But so long as the verdict is still not in, the best workers are quietly departing—to cooperatives and joint enterprises. Last year we lost 148 individuals. The replacements were clearly at a lower level—"raw untrained youth," yes and very few of them at that. Urgent measures must be undertaken before the situation reaches catastrophic proportions.

There is still one other problem: the construction of an almost completed production building has been halted. Tremendous resources were invested and still there has been no return.

Housing is being assigned in just as unreasonable a manner. We are working at Presne and a recommendation has been made to build apartments somewhere in

Solntsevo. We are prepared for this construction, only it appears that the rayispolkom [rayon executive committee] has not made a site available.

The plant has several recreation bases, including at Alushta. There they are building brick homes instead of wooden ones and also swimming pools.

[Chernetsov] It seems to me that the development of new economic forms at enterprises of the defense industry is generally proceeding slowly. But how can cost accounting be introduced for a 100-percent state order, when the price for our goods is stable, when above-plan products cannot be sold at contractual prices and when the profits are being immobilized almost completely in the treasury? It comes as no surprise to learn that among related plants nobody is devoting any thought to complete cost accounting. But is it possible that the reform was not meant for us? Who said that the "boxes" can work only under the conditions imposed by the long since compromised administrative-command system? The conversion has not yet reached the "Rassvet" Plant. Orders are ensured for the next five-year plan in its entirety and although substantial growth is planned in goods for the population, it is clear to all concerned that maximum attention will be not be given to them, particularly in view of the fact that there is no support for the product plan in the form of resources. Thus they are racking their brains over the question of how is it possible to sit on two chairs? It is my belief that only a serious reform can change the situation in our branch. The state order for defense products is ensured the required resources and thereafter we have a free market for goods, raw materials and equipment—this then, in my opinion, is the path to be followed by the Rassvet Plant for achieving a normal economy.

2. [Sannikov] We are destroying the reform at its roots by means of normative withholdings for the state budget. We are increasing production and yet the norms are growing. Overall, the operational results of the collective are levelling off and the principle of material interest is becoming null and void.

Yes and there are some plant leaders who have never had a good word said about them. There are also some weak leaders. Thus recently the chief of the Bureau for the Development of Consumer Goods was released from his post. Here there was nothing to brag about. We have been producing pumps for automobile and luggage carriers for many years—nothing better has been developed. On the other hand, the people trust the director, Yu. Kirillov—he is a native son who has passed through all of the stages of the service ladder, from worker to director.

[Chernetsov] The training of our leaders and administrators is extremely weak when we view it from the standpoint of today's training. All developed under the traditions of the administrative system—the psychology

of managing a collective, management, marketing, and I believe that their notion regarding these traditions is very general in nature.

The collective of workers has its own shortcomings. We reap the fruits of an irresponsible policy devoted to attracting them to the limit. Hundreds and thousands are brought in and still the city suffers from a shortage of working hands. Of the 44 workers assigned to us in 1975, only 6 remain at the present time.

We receive our "raw materials" from PTU's [vocational and technical schools]—here they do not teach common sense to the young people. A chisel or soldering iron are the principal training aids, and in the departments there are machines with program control and displays.

We must change radically our personnel policies and convert over to contractual relationships with the PTU's and we must pay only for good training of young specialists and interest them in obtaining grants.

3. [Sannikov] Everything that we are discussing is being viewed on the basis of all-round changes. Is it possible for journalists to visit the plant once or twice annually? There have also been many changes within the plant. The attitudes between people are changing, albeit with some squealing. The elections of the departmental chiefs were carried out democratically and openly.

I served 3 years as chairman of the plant's STK [labor committee council]. At the present time, a redistribution of functions between the council and the profkom [trade union committee] is being carried out. The STK is the highest organ, and its decisions on fundamental questions are mandatory for all. The profkom must protect the interests of the workers and guarantee social fairness.

[Chernetsov] Just as in the past, the people do not feel that they are protected against administrative arbitrary rule and they do not trust the trade unions. At the present time, they are turning more frequently to the STK's, since they are aware that the "hierarchy" listens to its decisions. Over a period of six months, the council had to abolish four orders issued by a chief of one of the departments.

4. [Sannikov] What can be said regarding the mood at the plant? It is similar to that found everywhere in Moscow and throughout the country. Negative emotions and lack of confidence still predominate—here the press and our government and legislators are at fault: there are many failures, mistakes and much running from one extreme to another. The personnel desire stability based upon legality and democracy and by no means the stagnant immobility which some dream about. They wish to live and work calmly and freely, without fear and urging on, while not living in luxury but at the same time without need or shortages as many experience in other countries. Have we not truly earned this?

[Chernetsov] We are grateful to Yuriy Fedorovich Sannikov for his assistance and support. It would be difficult

to adjust to conditions in the STK without him. I agree with him concerning the mood in the collective. We are astonished at times by the long period of suffering endured by our people, who to this day are still feeding an army of bureaucratic parasites of all types.

And at the plant, I would dismiss many of the administrators who are wearing out the seats of their trousers. I would add some fine specialists and genuine workers. And in this manner our labor productivity would increase by a factor of almost 1.5 with the same wages being paid out.

I associate the hopes for the economy to emerge from this crisis with the development of market relationships.

## INVESTMENT, PRICES, BUDGET, FINANCE

### Gosbank Chairman Describes Future of Banking Activity

904A0321A Moscow *EKONOMIKA I ZHIZN* in  
*Russian* No 16, Apr 90 pp 10-11

[Interview with USSR State Bank Board Chairman V. Gerashchenko by V. Balandin: "The Rules of the 'Banking Game'"]

[Text] It is hardly possible to overstate the role of banks in the economy, or their significance in the transition to a developed managed market. Recently the draft USSR laws "On the USSR State Bank" and "On Banks and Banking Activities" were submitted to the government. What are the key ideas of the bills? Why is it that two laws must be written? What in general is the place of the banking system in a market-type economy? Our correspondent interviewed V. Gerashchenko, chairman of the board of the USSR State Bank, on these matters.

[Balandin] The state is rising upon a legal foundation. More and more new laws are being written and passed. Another two will soon be added to them—about banks. Why are these laws needed? Are they being written just because this is currently the fashionable thing to do?

[Gerashchenko] If we wish to talk seriously about the development of commodity and money relations and about a market orientation, we would not be able to do without new approaches to banking affairs. From my point of view many of our misfortunes in the economy are associated precisely with the fact that the Gosbank's voice has not been loud enough. Formerly the USSR Ministry of Finance acted as the principal "legislator" in adoption of economic decisions, while the Gosbank concerned itself with implementing the general plan for the national economy's development by way of loan management. It issued money and loans more for the purposes of financing than crediting arising needs—that is, it served as the state's cash register.

Now the time has come to fundamentally alter the situation. In doing so, it is my conviction that the rules of

the "banking game" must be written not by the Council of Ministers but by the USSR Supreme Soviet. All countries possessing developed commodity and money relations necessarily have banking legislation and, as a rule, a central bank law.

Following the banking system's reorganization in 1987, we realized that we needed a law on banking activities. Banks, you see, are taking on more and more of the attributes of commercial establishments. Specialized banks are moving away from their specializations, and gradually transforming into all-purpose loan institutions. Every one of them already has clients representing different sectors of the economy. At the same time the central bank must enjoy a certain priority in relation to other banks. This is evident from the experience of all countries with a market economy. This is precisely why we need to adopt two laws: "On the USSR State Bank" and "On Banks and Banking Activities."

[Balandin] The law makes the USSR Gosbank a full-fledged central bank. What will be the legal basis of its activities? To whom will it be subordinated?

[Gerashchenko] In developed countries, the central bank has an independent status as a rule; it is subordinated not to the Council of Ministers but directly to parliament. But of course, this does not at all mean that the bank

makes decisions with absolutely no thought to the government's policy, including its budgetary policy. What are needed here are close interaction and coordinated decisions as to what sort of measures to emphasize—monetary measures, or taxation and budgetary measures. Our law establishes the principle that the central bank—that is, the USSR Gosbank—is accountable to the USSR Supreme Soviet. In its activities the USSR Gosbank must follow the country's laws, decisions of the Congress of USSR People's Deputies and the USSR Supreme Soviet, and its own charter.

The USSR Gosbank must make its evaluation of processes occurring in the country's economy, and offer certain recommendations in cases requiring parliamentary approval. On the other hand the task of the USSR Supreme Soviet includes, from my point of view, examination and approval of the directives of state monetary and loan policy for the year—that is, determination of the priority directions in which to allocate loan resources. As an example construction materials industry should enjoy such a priority today. Housing is one of the principal motivators of the individual's desire to work well throughout the entire world. Such investment of resources is extremely profitable to banks: Housing always increases in value, and there is always a demand for it. The central bank should implement this policy on the basis of directives approved for the year.

Loan Investments Among Union Republics (Remaining Loan Indebtedness)

	Short-Term			Long-Term		
	As of 1 Jan 89 (million rubles)	As of 1 Jan 90		As of 1 Jan 89 (million rubles)	As of 1 Jan 90	
		Million Rubles	% of 1 Jan 89		Million Rubles	% of 1 Jan 89
USSR total	302305.1	284597.4	94.1	102261.6	103310.0	101.0
including:						
RSFSR	156626.0	148747.9	95.0	66645.5	62566.3	93.9
Ukrainian SSR	38977.3	35023.5	89.9	13436.0	12565.7	93.5
Belorussian SSR	7563.0	6667.5	88.2	4340.2	4158.7	95.8
Uzbek SSR	15067.0	13867.2	92.0	2320.1	2257.1	97.3
Kazakh SSR	21695.5	21513.4	99.2	5895.9	5934.2	100.6
Georgian SSR	7462.1	6578.6	88.2	1701.7	1576.3	92.6
Azerbaijan SSR	6392.0	5834.3	91.3	935.2	855.1	91.4
Lithuanian SSR	2717.2	2649.5	97.5	1869.7	1857.9	99.4
Moldavian SSR	3450.2	2950.3	85.5	1222.3	1021.3	83.6
Latvian SSR	2067.9	1888.1	91.3	1139.4	1128.6	99.1
Kirghiz SSR	3243.1	3135.0	96.7	774.0	615.8	79.6
Tajik SSR	2543.2	2318.3	91.2	241.0	222.7	92.4
Armenian SSR	3591.8	3235.1	90.1	757.0	687.5	90.8
Turkmen SSR	2754.1	2576.8	93.6	476.3	366.4	76.9
Estonian SSR	849.5	871.9	102.6	442.4	461.1	104.2

**Loan Investments Among USSR Banks (Remaining Loan Indebtedness)**

	Short-Term			Long-Term		
	As of 1 Jan 89 (billion rubles)	As of 1 Jan 90		As of 1 Jan 89 (billion rubles)	As of 1 Jan 90	
		Billion Rubles	% of 1 Jan 89		Billion Rubles	% of 1 Jan 89
Total in the USSR Bank System	302.3	284.6	94.1	102.3	103.3	101.0
including:						
Industrial Construction Bank	87.8	78.9	89.8	20.2	18.7	92.6
Agroindustrial Bank	160.6	147.6	91.9	70.6	69.7	98.7
Housing and Social Services Bank	34.7	32.4	93.4	6.7	7.0	104.5
Foreign Economic Bank	18.4	19.3	104.9	4.7	6.1	129.8
Savings Bank	0.3	0.3	100.0	-	-	-
Commercial and cooperative banks	-	5.7	-	-	1.8	-

[Balandin] What will be the basis of the USSR Gosbank's relations with financial organs, and chiefly with the Ministry of Finance, in the future?

[Gerashchenko] The relations will be purely economic: The Gosbank will provide the USSR Ministry of Finance and the finance ministries of the union republics with loans on the basis of the principles of urgency, solvency and credit history, within the limits of the allocations established by the Supreme Soviet for these purposes.

[Balandin] The most important task of the central bank is to control the circulation of money. What levers are to be granted to the USSR Gosbank for this?

[Gerashchenko] According to the bill, circulation of money will be regulated by several means. First of all by changing the volume of loans granted by commercial banks, by purchasing and selling securities and foreign currency, and by changing the norms for the mandatory reserves to be maintained by commercial banks in the USSR Gosbank. Interest rates on loans issued by the Gosbank must be manipulated more actively. What do I mean by this? I am certain that these rates should be reviewed with an eye on increasing them. Money and credit must have a real "price," and not an arbitrary one. In general, the approach to establishing interest rates must be fundamentally different. The interest we pay on the people's assets maintained in banks should cover growth in the cost of living. Naturally loans should also be granted at interest rates which would allow banks to create the needed reserves, find assets with which to develop their structure, and computerize banking operations.

However, what we are presently encountering is an unpreparedness on the part of some sectors to work in the conditions of new loan interest rates. Take for example the agroindustrial complex. The condition imposed in it is this: Until such time that purchase prices are reviewed, higher interest rates cannot be required on loans granted to kolkhozes, sovkhoses and other enterprises of the complex. A similar situation exists in coal industry, which is planned to operate at a loss. By

employing new interest rates here, we will pass the expenses over to the budget. Everything is closely inter-related in the economy, and unfortunately you can't pull just one thread in order to disentangle the entire knot.

[Balandin] I would like to know your opinion on one other very sensitive matter. The political events occurring in the Baltic republics and the aspiration for independence have led in particular to enactment of laws on banking affairs and money circulation. Thus according to these laws the corresponding central bank is the sole issuing center on its territory having the right to place its own republic banknotes into circulation. Could you comment on this?

[Gerashchenko] It is my deep conviction that there can only be one central bank with its own network in the country. This is precisely what the draft laws "On the USSR Gosbank" and "On Banks and Banking Activities" say. If we base our discussion on the notion that a single national economic complex exists in the country, together with the entire complexity of ties among different enterprises—state, joint-stock, cooperative, private—then there should also be a single monetary system. It is precisely this obvious fact which the developers of national currencies do not wish to recognize. Simply speaking, they are attempting to introduce a constraint upon the sale of goods, though not by means of ration cards and permits but by means of their monetary unit.

Were we to create national currencies, we would end up with a laughable situation. There would be 15 "pretty" monetary units in our 15 republics, but whatever would be the reason for this? This would only mean extra technical expenses. Let's consider the principles that have evolved in Europe. Europe is attempting to create a single currency union, and sooner or later it may reach a point where it creates a single central bank. And even the need itself for the economy's development requires expansion of the market, and not its constriction, not the installation of "fences."

[Balandin] What is the future destiny of state specialized banks?

[Gerashchenko] I do not wish to be a prophet, but some thought should be given to converting them into joint-stock companies. In this case the state could be one of the principal shareholders as a means of implementing its investment policy. If a specialized bank has a wide range of shareholders interested in its development and growth, and in obtaining dividends on invested capital, it will not orient itself on commands from above.

[Balandin] Does this essentially mean gradual transformation of departmental banks into commercial ones?

[Gerashchenko] That's absolutely right. Departmental, purely state banks must become commercial banks. In these banks the state would have its own portfolio of stocks, and the corresponding quantity of votes, but it would approach the solution of problems chiefly on a commercial basis, an economic basis.

[Balandin] Consequently the country's unified banking system should include a central bank (the USSR Gosbank) and commercial banks. It is these important elements of the market infrastructure, called upon to act as catalysts in the market's development, that I would like to discuss. What have been the first results of the operation of commercial banks? How do you envision their future activity?

[Gerashchenko] Let's begin with a few figures. The charters of 170 commercial and 91 cooperative banks have been registered thus far. Out of the 170 commercial banks 68 are regional, 5 are intersector, 70 are sector, 19 are innovational, 4 were created by intersector state associations, and 4 were established by public organizations.

At the moment these banks are not having a significant influence on the development of credit relationships in the national economy. The total declared charter fund of the banks is around 3.5 billion rubles, of which 3.1 billion rubles have been paid out as of March 1990. Assets on account and deposited assets total 6 billion rubles. Loans granted to enterprises, organizations and cooperatives total 8 billion rubles, while loans to banks total 1.8 billion rubles. The proportion of loan investments by commercial banks is around 2 percent of the total loan portfolio of the banking system. As of 1 January 1990 387.9 billion rubles were invested into the national economy as loans, including 284.6 billion rubles of short-term loans and 103.3 billion rubles of long-term loans.

Creation of commercial banks is a fully objective process. At the same time negative factors are also observed in their activities. What am I referring to? Very often commercial banks fail to consider credit risk and provide assistance to enterprises which, rather than receiving credit, should have been subjected to a certain degree of economic improvement. The bank is tempted by the

higher percentage rate which these enterprises are prepared to pay. A particular result of this is the occasional failure of the policy of limiting loans from specialized state banks that are supposed to be using credit to fight negative phenomena in the economy. Such as excessive stockpiles for example. In a word, as of 1 October 1989 the stockpiles of commodity and material valuables was 542.9 billion rubles, having increased by 51.9 billion rubles since 1 January 1989. Working capital totaling 247 billion rubles, or 83 percent of the standard, has been frozen in excessive stockpiles.

In the future the central bank will pursue a stricter policy in relation to commercial banks. In 1988-1989 commercial banks were given a certain amount of free rein, and the USSR Gosbank provided them assistance by granting loans. In the future, however, these banks are to find resources not in the central bank but in the capital market, which is just being formed at the moment. It may be possible that in connection with issue of treasury notes, so-called Lombardian credit may come into being in the near future—that is, credit granted to commercial banks by recalculating treasury notes purchased by them.

Also important is the matter of creating a special auditing service in the country. How can one bank temporarily provide free assets to another if the balance of the borrowing bank not only is unpublished but also is unverified by an independent auditing service? Owing to such a service, access to banking information will become possible, and there will be the assurance that the given bank is conducting business in accordance with the rules.

[Balandin] In a two-level banking system, each bank must place part of its resources on deposit with the central bank. Will we be doing this, and in what manner?

[Gerashchenko] We are already introducing certain reserve requirements binding upon all of the country's banks this year. Prior to this time, such requirements concerned only commercial banks, but as of 1990 they pertain to state specialized banks as well. This creates a certain reserve allowing manipulation of real loan resources. Depending on the financial and loan policy pursued, the percentage of reserve requirements, which was initially established at 5 percent, will increase or decrease.

[Balandin] Has the USSR Council of Ministers not opposed the writing of the laws on the state bank and the banking system? This would, after all, mean removing banks from its jurisdiction.

[Gerashchenko] We did not feel this to be the case. But I would like to say that the USSR Council of Ministers and its Presidium are swamped today by a mass of issues that hardly need to be resolved at the government level. Therefore some officials might of course become apprehensive that they are losing hold of an accustomed lever used in the granting of loans in specific sectors. What they need to understand is that there is nothing terrifying in this. Were the entire credit and financial system to

operate independently and on a commercial basis, this would only increase the economy's effectiveness. This, by the way, is also basically the opinion of administrators and economic scientists. On the other hand the central bank and the banking system as a whole are responsible to those who entrusted their money to them. This is another thing they should not forget as they actively grant loans.

### **Draft Law on USSR State Bank Published**

904A0311A Moscow DENG I KREDIT in Russian  
No 3, Mar 90 pp 3-12

#### **["Draft of the USSR Law on the USSR State Bank"]**

[Text] Recently, an ever more urgent demand has been made for improving the country's money-and-credit system as one of the most important components of the new economic mechanism. In view of that, the First Congress of People's Deputies of the USSR envisaged in its decree "On the Main Lines of USSR Domestic and Foreign Policy" the need to perform measures to strengthen the role and increase the independence of the USSR State Bank—the country's central bank, which ensures the conduct of a uniform policy of the state in the areas of the circulation of money, credit, and settlements, and along other lines of banking activity.

Settlement of these urgent issues, creation of the legal foundations of a new model of money-and-credit regulation of the economy, and radical improvement of the activity of USSR Gosbank and the banking system—these problems form the basis of the draft of the USSR Law on the USSR State Bank.

The draft was prepared by USSR Gosbank with the help of other central economic departments and ministries, including USSR Gosplan, USSR Minfin, USSR Minyust, as well as specialized USSR banks. Specialists of the Economics Institute, the Institute for the World Economy and International Relations, the All-Union Scientific Research Institute of Soviet Construction and Legislation, the Institute for Economic Problems of Scientific-Technical Progress, the Central Mathematical Economics Institute, and other scientific organizations were called upon in working out the draft law. Their proposals were taken into account in formulating the provisions of the law concerning the jurisdiction of USSR Gosbank, the structure of the banking system, regulation of money and credit, etc. Consideration was also given to proposals from a number of USSR deputies which they expressed in speeches during sessions of the USSR Supreme Soviet. Articles and reviews published in the press by banking scholars and practitioners were carefully analyzed with a view to making maximum use of the progressive proposals they contained.

The draft that has been prepared of the USSR Law on Gosbank contains a number of fundamentally new provisions pertaining both to the structure of banks in the country and also to the money-and-credit mechanism.

It is proposed that USSR Gosbank be made accountable to the USSR Supreme Soviet, which will place the conduct of money-and-credit policy under the direct oversight of the supreme body of legislative power.

The country's banking system is becoming two-tier. At the first level, there is USSR Gosbank, while all the other banks are on the second. These banking institutions, regardless of the form of ownership and the way charter capital is formed, are commercial banks that serve the economy by supplying credit and conducting settlement operations.

The draft of the law calls for renouncing the methods of managing the circulation of money by planning credit and cash transactions and for making the transition to regulation of the circulation of money without a rigid breakdown into cash and noncash components. Mandatory planning targets will be assigned only for the growth of the total volume of money in circulation.

Within the limits of the allowance for the growth of the money supply, credit resources are allowed to move freely from bank to bank, which creates the necessary prerequisites for creating a money market and a credit market. At the same time, the circulation of money will be regulated on the basis of Directives of State Money-and-Credit Policy drafted by USSR Gosbank and approved by the USSR Supreme Soviet.

It is noted that the interest rates on credit operations will be established by the commercial banks on the basis of contracts with borrowers. Gosbank will regulate the level of these interest rates by changing the rates on its own credits granted to the commercial banks.

The issue of taking credits from USSR Gosbank to cover the deficit in the state budget is to be resolved on a fundamentally new basis. USSR Gosbank will extend credits to the USSR Ministry of Finance and to the finance ministries of the union republics solely on the principles of payment for the use of the credit and its repayment by a certain date, within the limits of the allowances established for those purposes by the USSR Supreme Soviet.

The draft of the law has developed the procedure that has taken shape in the last 2 years for creating commercial banks, including joint banks in which foreign juridical persons participate. The foundations have been clearly defined for refusal to issue a license to create a bank and also for revoking a license that has been issued. Considerable space has been given to the various aspects of USSR Gosbank's regulation of the activity of commercial banks by economic methods and also to the organization of monitoring.

Substantial changes are being made in the management structure and principles of management of USSR Gosbank. USSR Gosbank establishes in the republic capitals its main offices, which are referred to as the gosbanks of the union republics. They in turn form the network of their own institutions. A new governing body of USSR

Gosbank is being created—the Central Council, whose members, aside from the chairman of USSR Gosbank and his deputies, also include the board chairmen of the gosbanks of the union republics. We should note that the board chairmen of the gosbanks of the union republics are appointed by the chairman of USSR Gosbank in agreement with the supreme soviet of the union republic.

The draft of the law also provides other measures aimed at improving the banking system.

In deciding to publish the draft of the USSR Law on the USSR State Bank, we are assuming that readers of the journal DENG I KREDIT will take an active part in discussing it and will make quite a few valuable suggestions as to improving the activity of USSR Gosbank under present conditions.

#### **Draft Law of the Union of Soviet Socialist Republics on the USSR State Bank**

##### **Section I. General Provisions**

##### **Article 1. USSR State Bank as the country's central bank.**

The USSR State Bank (USSR Gosbank) is the country's central bank and is the property of the Union of SSR.

##### **Article 2. Principal tasks of USSR Gosbank.**

The principal tasks of USSR Gosbank consist of conducting the policy of the state in the fields of the circulation of money, credit, and settlements, of guaranteeing the stable purchasing power of the ruble, and of regulating and monitoring the activity of the commercial banks within the limits established by the present Law.

With a view to performing the tasks assigned to it, USSR Gosbank takes part in preparing drafts of the state plan for economic and social development of the USSR, the USSR State Budget, the country's summary foreign exchange plan and other state plans whose execution has an influence on the state of the circulation of money.

##### **Article 3. Legal basis of the activity of USSR Gosbank.**

In its activity, USSR Gosbank is guided by the present Law, other USSR laws, other decisions of the USSR Congress of People's Deputies and the USSR Supreme Soviet, and by its own Charter.

##### **Article 4. Accountability of USSR Gosbank.**

The USSR State Bank is accountable to the USSR Supreme Soviet.

The chairman of USSR Gosbank is nominated by the chairman of the USSR Supreme Soviet, appointed by the USSR Supreme Soviet, and approved by the USSR Congress of People's Deputies.

The chairman of USSR Gosbank is responsible to the USSR Congress of People's Deputies and the USSR Supreme Soviet and accountable to them. The chairman of USSR Gosbank takes part in the proceedings of the

USSR Council of Ministers. The term of office of the chairman of USSR Gosbank is 5 years.

The activity of USSR Gosbank is followed by the appropriate committee of the USSR Supreme Soviet.

##### **Article 5. Normative acts of USSR Gosbank.**

USSR Gosbank issues normative acts binding on all banks in the USSR on matters that lie in the competence of USSR Gosbank.

The draft versions of legislative acts submitted for consideration to the USSR Supreme Soviet and USSR Council of Ministers touching upon matters of the activity of the banking system in the USSR are subject to prior clearance with USSR Gosbank.

##### **Article 6. USSR Gosbank as a juridical person.**

USSR Gosbank makes administrative and housekeeping expenditures out of its income.

The location of USSR Gosbank is in the city of Moscow.

The state is not liable for the obligations of USSR Gosbank, nor is USSR Gosbank liable for the obligations of the state, except in cases when that liability has been placed on it by the USSR Supreme Soviet or when it assumes such liability.

##### **Article 7. Capital of USSR Gosbank.**

USSR Gosbank has charter capital amounting to 3,000 million rubles, which serves to cover its obligations. A change may be made in the size of the charter capital of USSR Gosbank by decision of the USSR Supreme Soviet.

USSR Gosbank creates other funds for various purposes, the procedure for whose formation and use is regulated by its Charter.

##### **Article 8. Accountability of USSR Gosbank.**

Annually, by the appointed date, USSR Gosbank files with the USSR Supreme Soviet its balance sheet, a profit-and-loss statement, a report on its operation, and the summary balance sheet of the banking system.

USSR Gosbank publishes its balance sheet and profit-and-loss statement.

##### **Article 9. Exemption of USSR Gosbank from payment of taxes, levies, and duties, and the distribution of profit.**

USSR Gosbank and its institutions are exempted from the payment of state and local taxes, levies, and state duty.

Every year USSR Gosbank proposes a distribution of its profit which is subject to approval by the USSR Supreme Soviet.

##### **Article 10. Stamp containing the seal.**

USSR Gosbank and its institutions have a stamp with an image of the USSR State Seal and their respective names.

## Section II. Regulation of Money and Credit

### Article 11. Management of the circulation of money.

USSR Gosbank is the country's note-issuing center, and it regulates the volume and structure of the money in circulation. For the purpose of this Law, "money in circulation" means currency (notes of the USSR State Bank, treasury bills, and coin), money in accounts and deposits of juridical persons and individuals, and other unconditional money obligations of banks. The volume and structure of the money supply are regulated on the basis of the Directives of State Money-and-Credit Policy drafted by USSR Gosbank and submitted annually for approval to the USSR Supreme Soviet simultaneously with presentation of the draft version of the USSR State Budget.

The Directives of State Money-and-Credit Policy establish as a planning indicator the maximum limits of the supply of money in circulation and also propose the principal methods of achieving that indicator in conjunction with state economic policy.

The volume and structure of the supply of money in circulation are regulated by changing the amount of credit extended by commercial banks; by the purchase and sale of securities and foreign exchange; by altering the rates of mandatory reserves which commercial banks must place in USSR Gosbank; and by changing the rates of interest to be paid on credits of USSR Gosbank.

By decision of the USSR Supreme Soviet, USSR Gosbank may institute restrictions on the volume of credit investments by commercial banks.

### Article 12. Management of the state debt.

In agreement with the USSR Government and the governments of the union republics, USSR Gosbank manages the state debt, conducting operations related to the placement of state loans, their repayment, and the payment of interest on them.

### Article 13. Duties of USSR Gosbank related to cash execution of the USSR State Budget.

USSR Gosbank organizes and accomplishes through the commercial banks the cash execution of the USSR State Budget.

### Article 14. Regulating the level of interest rates.

USSR Gosbank regulates the level of bank interest rates in the country by changing the rates on its own credits extended to commercial banks.

USSR Gosbank may institute restrictions on the level of interest rates in operations of commercial banks in the form of the minimum and maximum limits of fluctuations of the rates.

### Article 15. USSR Gosbank's organization of settlements among banks.

USSR Gosbank organizes settlement among commercial banks through correspondent accounts which those banks open in USSR Gosbank.

### Article 16. Organization of the circulation of bank notes.

USSR Gosbank has exclusive right to put bank notes into circulation and withdraw bank notes from circulation.

USSR Gosbank organizes the manufacture, transport, and storage of bank notes, creates reserve funds of bank notes, establishes denominations and the procedure for determination of payability, and also the procedure for replacement of damaged bank notes and their destruction.

USSR Gosbank organizes the storage and collection of bank notes in the USSR banking system and issues rules governing the storage and collection of bank notes in the economy.

## Section III. Operations of USSR Gosbank

### Article 17. Operations with the USSR budget and the budgets of the union republics.

USSR Gosbank extends credits to the USSR Ministry of Finance and the finance ministries of the union republics on the principles that these credits will be extended for a charge and will be repaid by a stated date, within the limits of the allowances established by USSR Gosbank for these purposes by the USSR Supreme Soviet.

### Article 18. Operations with banks.

USSR Gosbank is empowered as follows:

- a) to issue credits to commercial banks for a term in agreement with the borrower;
- b) to purchase and sell promissory notes bearing signatures of the required three persons with known credit-worthiness and with a payment date within 3 months from the date of purchase;
- c) to purchase and sell securities issued by the USSR Government and the governments of the union republics;
- d) to extend credits for a term not exceeding 3 months, secured by the following:
  - promissory notes meeting the requirements of Subparagraph b) of this article in an amount that does not exceed nine-tenths of their face value;
  - securities envisaged by Subparagraph c) of this article in an amount that does not exceed nine-tenths of their face value;
- e) to purchase and sell foreign exchange and payment documents denominated in foreign currency and issued by Soviet and foreign banks.



**Article 19. Operations on the securities market.**

For the purpose of regulating the circulation of money, USSR Gosbank may purchase and sell securities on the market at market prices:

- promissory notes meeting the requirements of Subparagraph b) of Article 18 of the present Law;
- securities envisaged by Subparagraph c) of Article 18 of this Law.

**Article 20. Settlement and cash services to individual organizations.**

USSR Gosbank may provide cash and settlement services to individual organizations.

**Article 21. Participation of USSR Gosbank in Soviet and foreign enterprises and organizations.**

USSR Gosbank may invest as a participant resources in enterprises, associations, and other organizations in rubles and foreign currency both on the territory of the USSR and also abroad.

**Section IV. USSR Gosbank's Foreign Economic Activity****Article 22. USSR Gosbank's foreign economic functions.**

USSR Gosbank represents the interests of the USSR in relations with the central banks of other countries, in international banks, and other finance-and-credit organizations where intergovernmental cooperation is envisaged at the level of central banks.

In performing the tasks indicated in Article 2 of the present Law, USSR Gosbank may conduct any operations in foreign currency envisaged by Article 2 of the USSR Law on Banks and Banking Activity (Draft).

**Article 23. Rate of exchange of the ruble against monetary units of foreign states.**

USSR Gosbank sets the exchange rate of the ruble against the monetary units of foreign states.

**Section V. Licensing Functions of USSR Gosbank****Article 24. License of USSR Gosbank to create commercial banks.**

USSR Gosbank issues the license for creation of commercial banks.

In addition to the documents envisaged by current legislation in the USSR concerning joint stock companies and other economic partnerships, the following documents must be filed to obtain a permit to create a commercial bank organized on the principles of membership:

- application for issuance of the license;
- economic substantiation;
- information on the professional competence of the

managers of the bank proposed by the founders (participants).

The documents envisaged by Part 1 of this article must be filed to obtain a permit to create a state commercial bank, except for the founding agreement and also the copy of the decision of the executive and administrative body of government creating the bank.

The content of the documents to be submitted and the procedure for issuing permits are defined by USSR Gosbank.

**Article 25. Additional documentation for creating joint commercial banks in which Soviet and foreign juridical persons and foreign nationals participate.**

In addition to the documents indicated in Article 24 of the present Law, the following duly legalized documents are filed to obtain a license to create a joint commercial bank:

- for founders (participants) who are juridical persons:

a charter or other document confirming their juridical status and the balance sheet published for the last 3 years;

- the decision on participation in the joint bank of the appropriate body of the foreign founder (participant);
- a written statement from the monitoring agency of the country where the foreign founder (participant) resides to the effect that it does not object to participation of the foreign founder (participant) in a joint bank on the territory of the USSR or a statement of the authorized agency or authoritative legal service to the effect that under the legislation of the country where the founder (participant) resides such a permit is not required.

**Article 26. Grounds for refusing issuance of a license.**

USSR Gosbank may refuse to issue a license to open a commercial bank on any of the following grounds:

- that the founding contract and charter do not conform to legislation in effect in the USSR;
- that the purposes of organizing the bank do not conform to the interests of the economy and the goals of development of the banking system in the USSR;
- that the financial condition of the founders or participants is unstable;
- an unfavorable assessment of the prospects for development of the bank's operations and its profitability.

USSR Gosbank may call upon the founders (participants) to replace the managers of the commercial bank if it reaches the conclusion that they are not fit for that work.

Failure to meet that requirement entitles USSR Gosbank to refuse to issue the license or to revoke a license that has been granted.

**Article 27.** Period of time for examination of the application.

USSR Gosbank examines applications for issuance of a license within a period of time that does not exceed 1 month from the moment the application is received.

**Article 28.** Grounds for revoking a license.

USSR Gosbank may revoke a license to create a commercial bank in the following cases:

- detection of untrue information used as the basis for issuing that license;
- delay of commencement of activity more than 1 year from the date the license was issued;
- failure to observe the economic standards fixed by USSR Gosbank under Article 35 [original reads "Article 34"] of the present Law;
- performance of operations that lie outside the limits of the specific legal capacity envisaged by the bank's charter;
- the submittal of untrue or misleading information or reports.

The revoking of a license has the effect of a decision to liquidate the bank.

**Article 29.** Requirement that commercial banks notify USSR Gosbank of changes in the founding documents.

Commercial banks are required to notify USSR Gosbank of changes made in the founding documents. If the changes in the founding documents contain grounds for refusing to issue a license as envisaged in Article 26 of the present Law, USSR Gosbank may revoke the license issued with the consequences envisaged by Article 28 of the present Law.

**Article 30.** Foreign banks, their branches and representative offices.

The procedure for the opening and closing of banks whose charter capital is formed with the resources of foreign juridical persons and individual citizens—"foreign banks," branches of foreign banks and their representative offices—is regulated by legislation in effect in the USSR concerning economic activity of foreign juridical persons and individuals on the territory of the USSR. In all respects not envisaged by that legislation, the effect of the present Law and the USSR Law on Banks and Banking Activity (Draft) extends to "foreign banks" and branches of foreign banks.

USSR Gosbank furnishes accreditation in the USSR for representative offices of foreign banks.

**Article 31.** Issuance of licenses by USSR Gosbank to conduct operations in foreign exchange.

USSR Gosbank issues licenses for a commercial bank's performance of operations in foreign exchange in the USSR and abroad on the basis of the bank's application,

depending on the economic feasibility and the bank's preparedness to conduct them.

**Article 32.** Issuance of permits by USSR Gosbank to take credits abroad.

USSR Gosbank issues permits to Soviet organizations to take credits abroad within the limits of the total allowance of foreign indebtedness of the USSR established by the USSR Supreme Soviet.

**Article 33.** All-union bank register.

USSR Gosbank keeps the all-union register of banks in the USSR. Newly created commercial banks acquire the status of a juridical person from the moment of their registration in the all-union bank register.

"Foreign banks" and branches of foreign banks may conduct banking operations only after they have been entered in the register. Representative offices of foreign banks must be entered in this register.

When a bank is closed or a branch or representative office of a foreign bank or other credit institution is eliminated, the entry in the register is nullified.

**Article 34.** Appeal procedure and settlement of disputes.

Decisions made by institutions of USSR Gosbank in their performance of the licensing functions of USSR Gosbank may be appealed to the board of USSR Gosbank. Decisions made by the board of USSR Gosbank may be disputed by founders (participants) of commercial banks or by commercial banks. The dispute is referred to USSR Gosarbitrazh or to the court which has jurisdiction.

#### **Section VI. USSR Gosbank's Regulation of the Activity of Commercial Banks**

**Article 35.** Economic standards set by USSR Gosbank for commercial banks.

In order to ensure the financial strength of commercial banks and to protect the interests of their creditors, USSR Gosbank sets the following economic standards for commercial banks:

- the minimum size of charter capital;
- the limit ratio between the size of the bank's own resources and the sum of its assets;
- indicators of the liquidity of the balance sheet;
- the size of mandatory reserves to be placed in USSR Gosbank;
- the maximum amount of risk per borrower.

**Article 36.** Limit ratio between the commercial bank's own resources and the sum of its assets.

USSR Gosbank defines the procedure for calculating "own" resources and for evaluation of assets for the purposes of establishing the limit relation between the

amount of the bank's own resources and the sum of its assets and also for calculating the maximum level of risk per borrower.

**Article 37.** Indicators of the liquidity of the balance sheet.

USSR Gosbank establishes the indicators of the liquidity of the commercial bank's balance sheet in the form of the standard ratio allowed between assets and the bank's liabilities, taking into account their maturity structure and also the possibility of realizing those assets.

**Article 38.** Level of legal reserves.

USSR Gosbank establishes the level of legal reserves as a percentage of the liabilities of commercial banks.

Commercial banks maintain the established size of uncommitted assets in reserve accounts in USSR Gosbank.

**Article 39.** Maximum level of the risk per borrower.

USSR Gosbank establishes the maximum size of the risk per borrower in the form of a certain percentage of the total amount of the bank's own resources.

For the purpose of calculating the maximum risk per borrower, the term "risk" includes the sum total of investments and credits extended to that borrower as well as guarantees, endorsements, and other obligations issued at his request.

**Article 40.** Authority of USSR Gosbank in defining the procedure for forming insurance funds and reserve funds.

In agreement with the USSR Ministry of Finance, USSR Gosbank defines the procedure for formation from the profit of commercial banks insurance funds and reserve funds intended for coverage of possible losses.

**Article 41.** Authority of USSR Gosbank when commercial banks violate the established standard allowances.

When it detects that some commercial bank has violated the standard allowances established in accordance with this section of the Law, USSR Gosbank prescribes the dates and other conditions for correction of the violations.

In case of systematic violations of standard allowances and failure to carry out the prescriptions of USSR Gosbank with respect to the dates and conditions for bringing bank operations into conformity with the standard allowances, when losses are shown in the annual results, or when a situation arises that threatens the interests of the bank's creditors, USSR Gosbank may raise the following issues before the commercial bank's founders (participants) or before the appropriate state agency:

- performance of measures for the bank's financial recovery;

- reorganization of the bank;
- liquidation of the bank.

USSR Gosbank may invoke as an economic penalty a higher rate of compulsory reserves for commercial banks violating the standard allowances established in this section of the Law.

If circumstances arise as envisaged in this article, USSR Gosbank may appoint a temporary administration to manage the bank over the period of time necessary for its financial recovery.

USSR Gosbank may also revoke the license to create the commercial bank if circumstances envisaged in this article arise with the consequences envisaged in Article 28 of the present Law.

#### **Section VII. USSR Gosbank's Oversight of the Activity of Commercial Banks**

**Article 42.** Oversight functions of USSR Gosbank.

USSR Gosbank monitors observance of USSR banks of the mandatory standard allowances established in accordance with the present Law and proper application of bank legislation and the normative acts it has issued.

In order to perform that function, USSR Gosbank may schedule a complete or sample examination of the operations of commercial banks.

The examination of the activity of commercial banks is conducted by the auditing department of USSR Gosbank or on its order by an auditing organization.

In order to support performance by USSR Gosbank of its oversight activity, commercial banks are required to furnish it balance sheets, plans, reports, and other documents.

**Article 43.** Activity of USSR Gosbank within the framework of oversight.

USSR Gosbank may within the limits of oversight require commercial banks to take steps indispensable to achieving a stable situation, to increase their own resources, to make changes in the structure of assets, and it may also use the authority granted it under Article 41 of the present Law.

**Article 44.** Reporting and information to be furnished to USSR Gosbank by commercial banks.

USSR Gosbank establishes for commercial banks the character and scope of reporting and other documents necessary for performance of its oversight functions.

**Article 45.** Definition by USSR Gosbank of the accounting rules in commercial banks.

USSR Gosbank establishes the rules of bookkeeping and accounting in commercial banks.

**Section VIII. Structure and Management of USSR Gosbank**

**Article 46. Structure of USSR Gosbank.**

USSR Gosbank establishes its main offices in the capitals of the union republics and the Central Office of USSR Gosbank in the city of Moscow.

The main offices in the union republics are referred to as the state banks or gosbanks of the union republics.

In agreement with the board of USSR Gosbank, the state banks of the union republics set up a network of institutions to perform the functions of USSR Gosbank.

The state banks of the union republics operate on the basis of regulations concerning them adopted by USSR Gosbank.

With all its institutions, USSR Gosbank comprises a unified and centralized system.

**Article 47. Governing bodies of USSR Gosbank.**

The Central Council of USSR Gosbank and the board of USSR Gosbank are the governing bodies of USSR Gosbank.

**Article 48. Central Council of USSR Gosbank.**

The Central Council of USSR Gosbank consists of the chairman of USSR Gosbank, his deputies, and the chairmen of the boards of the state banks of the union republics.

The Central Council of USSR Gosbank examines the Directives of State Money-and-Credit Policy for submittal to the USSR Supreme Soviet; makes decisions on adoption of restrictions on the amount of credit investments of commercial banks and the level of interest rates in operations of commercial banks; defines the general line for the conduct of business and management of USSR Gosbank, and may take up any aspect of the activity of the system of USSR Gosbank at its own discretion or at the instance of the board of USSR Gosbank or the boards of the state banks of the union republics.

With approval of the appropriate committee of the USSR Supreme Soviet, the Central Council of Gosbank adopts the Charter of USSR Gosbank.

The Central Council of USSR Gosbank meets at least once every 3 months under the chairmanship of the chairman of USSR Gosbank or his deputy.

Decisions of the Central Council of USSR Gosbank are made by a simple majority of votes in the form of decrees.

The members of the USSR Council of Ministers have the right to attend meetings of the Central Council of USSR Gosbank and to make their suggestions. On demand of

the USSR Council of Ministers, decisions of the Central Council of USSR Gosbank may be stayed for a period up to 2 weeks.

**Article 49. Board of USSR Gosbank.**

The board of USSR Gosbank consists of the chairman of USSR Gosbank, appointed in accordance with Article 4 of the present Law, his deputies, and members of the board.

The chairman of USSR Gosbank nominates deputy chairmen of USSR Gosbank, and they are appointed by the USSR Supreme Soviet.

Members of the board of USSR Gosbank are nominated by the chairman of USSR Gosbank and approved by the USSR Supreme Soviet.

The board of USSR Gosbank conducts its business under the chairmanship of the chairman of USSR Gosbank. Decisions of the board of USSR Gosbank are implemented by decrees and orders of the chairman of USSR Gosbank. Should there be a disagreement between the chairman and board, the chairman executes his own decision.

The functions of the board of USSR Gosbank are defined by the Charter of USSR Gosbank.

**Article 50. Chairman of USSR Gosbank.**

The chairman of USSR Gosbank directs the entire activity of USSR Gosbank, bears personal responsibility for performance of the tasks placed on USSR Gosbank, and represents USSR Gosbank both within the USSR and also abroad.

The functions of the chairman of USSR Gosbank are defined in the Charter of USSR Gosbank.

**Article 51. Board of the state bank of the union republic.**

The board of the state bank of the union republic consists of the chairman of the board, his deputies, and the members of the board.

The chairman of the board is appointed by the chairman of USSR Gosbank in agreement with the republic's supreme soviet.

Deputy chairmen of the board are nominated by the chairman of the board of the state bank of the union republic in agreement with the union republic's supreme soviet, and appointed by the chairman of USSR Gosbank.

The chairman of the board of the state bank of the union republic nominates the members of the board, who are approved by the chairman of USSR Gosbank.

The functions of the board of the state bank of the union republic and of its chairman are defined in the Charter of USSR Gosbank.

**Article 52. Network of institutions of USSR Gosbank.**

The procedure whereby the state banks of the union republics create the network of institutions of USSR Gosbank at the local level, their functions, and the organization of their management are defined in the Charter of USSR Gosbank.

**Article 53. Procedure whereby this Law takes effect.**

The procedure whereby the present Law takes effect is determined by the USSR Supreme Soviet.

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**Relation of Consumer Prices to Production Costs, Personal Income**

904A0272A Moscow IZVESTIYA AKADEMII NAUK  
SSSR: SERIYA EKONOMICHESKAYA in Russian  
No 1, Jan-Feb 90 pp 80-96

[Article by S.N. Zhuravlev: "Consumer Prices: Their Correlation With Expenditures and Effects on Population Income and National-Economic Indicators"]

[Text] *Relying on calculations of the actual costs of production of various consumer goods and services, the article makes an attempt to ascertain how the expanded output of these or those types could be reflected in the balance of income and spending for the population and the state budget. The actual scope of the redistribution of the income of the population through the system of taxes and consumer-price subsidies and its effects on the status of people with various levels of material sufficiency are evaluated. The distortions that are introduced into the indicators of the rate and proportions of the development of our economy by prevailing prices are revealed.*

We researched in a prior article (see (1)), with the aid of a model of the intersector balance sheet, what shifts in the pricing system and the mutual financial relations of enterprises with the state could be caused by the mass conversion of enterprises to the conditions of leasing and real self-financing. Perhaps of no less interest than the indices of wholesale-price changes in the transition of enterprises to self-financing, however, is another result of the calculations of the pricing model—the indicators of the resource-intensiveness of products (i.e., the ratio of their true wholesale, or more precisely factor, prices to the ultimate spending of the consumer)—and first of all, naturally, consumer products. They can be used not only to evaluate the changes in the system of consumer prices

that the straightening out of the latter could lead as a result of the full or partial abolition of subsidies and sales taxes, but also to select the priority areas of development in the consumer section of the economy in the event that this straightening out is not done or is limited to a comparatively narrow circle of goods.

**The cost of production of various consumer goods.** A comparison of resource-intensiveness indicators for various consumer goods makes it possible to describe their mutual substitutability, i.e., the consumption of a larger quantity of certain types of goods or services that could be produced additionally at the expense of reductions in the increase of consumption of others, naturally if the prevailing prices are maintained at the former levels<sup>1</sup>. Whence may be assessed the preferability of variations for expanding their production from the viewpoint of maximizing the consumption of the population with given expenditures of resources in the economy (and with limitations on demand). It is also possible to assess, with the aid of indicators of full resource-intensiveness, the dimensions of the budget subsidies for expanding the production of these or those consumer goods: they are required if the resource-intensiveness exceeds the unit value<sup>2</sup>. Finally, with the aid of a system of equations for determining the indicators of resource-intensiveness, but without allowing for fixed capital in them, it is possible to find the value for the total expenses for wage payments (allowing for spending in contiguous sectors) per ruble of sales volume of these or those goods and services to the population, which makes it possible to describe the increase in their monetary income caused by the expansion of the production of various consumer goods. Whence it is possible to assess the comparative efficiency of increases in resources for satisfying consumer demand in the near future through the better utilization of existing production capacity. It is understandable that such an analysis makes sense only for a quite detailed product range, since in calculations for a group of amalgamated sectors—for example the 18 sectors that were considered in (1)—consumer goods with completely different resource-intensiveness may be produced in one and the same sector (it is enough to cite just meat and vodka, which are among the products of the food industry).

We present the extant levels of resource-intensiveness of the principal types of goods and paid services per ruble of sales volume to the population at prevailing retail prices (Table 1, columns 2 and 3).

**Table 1—Total Expenditures of Resources per Ruble of Goods and Paid Services to the Population, and Additional Income Received and Taxes Paid Through the Pricing System\***

Types of consumer benefits	Resource intensiveness, kopecks		Full value of subsidies (+) and sales taxes (-) per capita per year, in population groups, rubles		
	Total	Including wages	Low income (up to 600 rubles per capita per year)	Medium income (1,500 rubles)	High income (over 3,600 rubles)
<b>1. Food products</b>	135.3	56.0			
—fish	96.8	38.6	-0.2	-0.6	-1.8
—meat	186.0	78.0	+40.9	+90.7	+220.8
—milk	181.1	70.6	+23.9	+48.7	+107.3
—flower and meal	101.6	35.4	-0.1	-0.2	-0.2
—bread	99.3	44.6	"	"	"
—sugar	102.5	41.3	-3.2	-6.6	-14.9
—confectionery items	76.6	34.0	"	"	"
—vegetable oil and fat	79.9	32.4	-1.9	-2.3	-3.5
—fruits and vegetables	122.1	52.8	+10.2	+19.0	+42.7
<b>2. Clothing products</b>	74.1	32.6			
—cotton fabric	92.7	36.4	-2.8	-5.8	-15.9
—silk fabric	60.6	18.8	"	"	"
—woolen fabric	85.2	27.7	"	"	"
—linen fabric	90.5	39.6	"	"	"
—knitted fabric	57.6	25.8	-7.2	-21.4	-69.6
—clothing	81.2	38.9	-5.9	-16.9	-54.3
—leather, fur and shoes	71.8	32.1	-5.4	-13.6	-39.0
<b>3. Consumer durables</b>	54.3	26.6	-14.4	-47.9	-162.1
—electrical items	26.8	13.4	"	"	"
—radio equipment	63.8	33.9	"	"	"
—clocks, watches and photographic equipment	28.8	16.2	"	"	"
—motor vehicles	39.0	15.0	-4.1	-17.0	-90.1
—domestic instruments and machinery	60.4	27.6	-2.6	-12.7	-47.7
—furniture	89.0	47.9	"	"	"
—glassware and dishes	24.5	11.8	"	"	"
<b>4. Alcohol and tobacco items</b>	28.6	9.7			
—vodka	10.7	4.4	-30.9	-110.7	-391.9
—wine	43.4	12.9	"	"	"
—tobacco	64.8	23.6	—	—	—
<b>5. Services**</b>	313.3(183.8)	80.3			
—housing, municipal and consumer	601.9(285.4)	91.1	+43.5	+81.2	+219.6
—transport	162.2(139.3)	76.7	+5.7	+17.9	+62.5
—communications	267.0(210.8)	133.8	"	"	"

\*—Wage and price levels for 1982.

\*\*—For services, the first number signifies the total expenditures of resources calculated according to the same formula and with the same percentage norm as for the products of material production; the number in parentheses is the same with a zero percentage norm, i.e. the full cost or the lower bound of the resource-intensiveness per ruble of sales volume for paid services to the population. Since the data we have do not permit the delineation of paid and unpaid services in the sectors of public services, where both types of services are encountered (communications, health care, education, culture), it was hypothetically assumed in the calculations of resource-intensiveness of paid services overall that the share of paid services totals ½ of the total output of the "communications" sector, while the resource-intensiveness of paid services in the social and cultural sectors (without regard for interest) corresponds to the spending of the population for vacation passes and treatment in for-profit polyclinics, fees for children's preschool institutions and for shows (which probably understates somewhat the overall resource-intensiveness of paid services to the population, since the indicated types of services are actually subsidized from the budget in a volume roughly equal to the spending of the population for those purposes). The calculations of subsidies to the spending of the population for service payments was made according to the lower bound of their resource-intensiveness (i.e., with a zero interest rate but allowing for the depreciation of fixed capital).

The satisfaction of effective demand for various types of consumer products and services, according to the data presented in Table 1, is presently connected<sup>3</sup> with expenditures of productive resources that differ markedly in value. The greatest unit expenditures of resources apropos of material goods are typical of a number of food products (especially those of animal derivation—their resource-intensiveness is an average of 1.72 rubles per ruble of consumer expense, while it is an average of 0.95 rubles for food products of plant origin), while they are almost half that for items from light industry and an average of a third less for consumer durables. Roughly the same correlation of resource-intensiveness (albeit the differentiation is somewhat less there) takes shape in the event that we take into account only the current expenditures typifying the comparative opportunities for increasing the production volume of various goods without additional capital investment. Forecast calculations show that this gap in the levels of expenditure of productive resources tends to grow (with the retention of the prevailing retail prices). This signifies that an orientation toward the accelerated development of production of comparatively less expensive—from the point of view of the consumption of economic resources—goods and services, with all other conditions being equal, would expand substantially the opportunities for satisfying effective consumer demand in the near term. The limits of this expansion, of course, should be determined with a regard for the patterns of demand and the degree of urgency of the satisfaction of these or those needs.

The calculations also confirm the well-known fact of the comparatively higher resource-intensiveness of the development of the social sphere (and especially housing and paid services for the population) compared to the expansion of production of material goods for consumer purposes. The expenditures of resources per ruble of consumer spending will be, at a minimum, 1.9 times more for services than the average for consumer goods (at prevailing prices and with the current patterns of consumer spending in the sphere of services and without allowing for alcoholic beverages and tobacco products) even if the necessity of compensating for capital costs (interest payments) is not taken into account in calculating the resource-intensiveness of housing and others services. In other words, if every ruble invested in expanding the production of consumer goods creates additional opportunities for satisfying population demand for an average of 1.04 rubles and, that means, the income of the budget increases by 4 kopecks (and that is without allowing for alcoholic beverages and tobacco; these figures increase to 1.25 and 0.24 respectively with them), then that ruble used in the construction of housing and the development of the services sphere will be covered by consumer spending by no more than 0.54 rubles and requires another 0.46 rubles of subsidies from the budget for current spending and capital repairs (unpaid services, where the share of the budget in the spending comprises the whole 100 percent, are naturally not taken into account herein). We emphasize that the discussion here concerns goods and services

with the overall patterns of consumption and pricing extant today; the correlation could also be the reverse for certain types of them. This is explained by the comparatively high resource-intensiveness of the principal types of services for which the major portion (3/4) of consumer spending goes in the sphere of services—housing and municipal construction, transport and communications—first and foremost the low rent payments, which do not cover even a quarter of the overall expenses for the upkeep of the state housing stock (and a little more than half for municipal fees). Whence it is obvious that the orientation toward the rapid development of the social sphere, and especially housing construction, could in and of itself sharply worsen the problem of realizing the monetary income of the population if the terms for the offering of the corresponding services to them (i.e. expansion of the amount of paid services) are not altered at the same time.

The calculations show in particular that rent payments that correspond to the resource-intensiveness of housing—i.e., compensating for the spending on its capital repair and interest payments, proceeding from a depreciation term of 50 years for buildings and an interest rate equal to 6 percent, i.e., at the level of the stipulated rent payments for productive assets—should be an average of 58 kopecks per square meter of total (usable) space per month. It would have increased (allowing for the prevailing correlation between housing and usable area) by 4.7-5.8 times compared to the prevailing rates for apartment rents that were set in 1926-28, 13.2-16.5 kopecks per square meter of housing space (2, p 110). The size of the rent payments can of course be differentiated according to the quality and location of the housing. The expansion of housing construction would in that case prove to have no negative effect whatsoever on the balance of consumer monetary income and spending and the budget.

**The redistribution of population income through prices.** The considerable divergence between the resource-intensiveness and prices of individual goods and services is usually justified by the fact that more or less equal terms of access to vital goods of the first necessity (food products, housing) are created thereby, especially through subsidies, for people with differing incomes. A comparison of the size of subsidies received and sales taxes and paid in the purchase of goods by population groups with differing incomes in fact testifies that the correlation that takes shape here is more in favor of the high-income<sup>4</sup> groups of society (see (3)). A regard just for the direct price subsidies and excise taxes, however, of course provides a less than complete picture of the redistribution of popular income through prices, since it is also accomplished through indirect consumer-price subsidies (as manifested, in particular, in the form of reduced prices for equipment, fertilizers and fuels supplied to agriculture, for the fuel utilized for municipal purposes and the like), and chiefly through the system of wholesale and retail prices, today divorced from the actual reproductive expenditures in various sectors. The

deviations of the resource-intensiveness of products from their retail prices, which allows an accounting for all other forms of redistribution of popular income through prices aside from direct subsidies for them and sales taxes, is thus more correctly utilized for these calculations.

As can be seen from Table 1 (columns 4-6), compiled according to the data of the differentiated balance sheet of income and consumption of manual and office workers for the beginning of the current five-year plan, subsidies for consumer spending on food products actually increase sharply with increases in income. Whereas the net balance of subsidies and sales taxes for food products totals 33.2 percent (35.8-2.6) of the expenses of low-income families for those purposes, it is 38.2 percent (40.7-2.5) for middle-income families and 41.6 percent (44.1-2.4) for high-income families, which is explained by the increase in the amount of costly protein products consumed—especially meat, exactly where the larger subsidies go—in the nourishment of the high-income segments of the population. True, this calculation was made proceeding from correlations of resource-intensiveness and product retail prices that were identical for all income groups, and it may be assumed that consumption switches to more expensive—and correspondingly less subsidized—grades with a rise in income. The data of budget statistics, however, testify more to the reverse: the average purchase price of one kilogram of meat, for example, is 1.5 times more for low-income families than for the well-off ones<sup>5</sup> (see (3)).

It can also be seen from Table 1 at the same time that the total excise taxes paid in the purchase of all other goods (both direct and those manifested in the form of higher profit norms at the stipulated retail prices) increase rapidly with increases in income, and their growth as a result covers the total subsidies for food-products spending. If we do not take alcoholic beverages into account, the net balance of subsidies and sales taxes on consumer goods overall for low-income groups of the population will be positive ( $22.3 - 14.1 = 8.2$  percent of their expenses for purchases), for the population with medium incomes they are roughly in balance (the subsidies here total 20.5 percent, while the taxes are 18.7 percent, of purchasing expenses), and for high-income groups the magnitude of the sales tax (23.2 percent of the value of purchases) is now greater than the subsidies<sup>6</sup>. It should thus be acknowledged that the existing tax and retail-price subsidy structures nonetheless ease somewhat the differentiations in consumption of material goods by various income groups in the population (although it makes it worse, as we have seen above, in relation to food products): the correlation of the overall value of the purchases of high- and low-income groups (the spending differentiation factor), thanks to subsidies and taxes, is roughly 13 percent less than it would be without them.

The total subsidies received by the population for the payment of paid services, and especially municipal services, increases quite clearly with increases in income

(even without regard for the value of passes and spending on health treatment, the subsidized nature of which is doubtless higher in the high-income population groups). The overall ratio of those subsidies to the spending on goods and services for various income groups of the population is roughly identical. If we thus take a maximum profitability level (percentage norm) as 6 percent in calculating the resource-intensiveness of paid services and their subsidized nature accordingly, this ratio will lie within the range of 19 percent for families with low incomes to 15 percent for those best off. And if we take into account that the lion's share of the subsidies for overall spending on payments for services goes for housing, the quality of which is most likely better for high-income segments of the population (which is not taken into account in our calculations), then this gap in the relative magnitude of the subsidies received is probably even smaller. It is thus possible to say that the existing subsidized nature of the services sphere, as conditioned first and foremost by low apartment rents, proves to have no appreciable effect on the overall extent of differentiation of the consumption of material goods and services by population groups with differing incomes.

The analysis performed of the redistribution of income through the mechanism of taxes and retail-price subsidies makes it possible to draw a few conclusions on expedient forms of compensation for the population for losses in the event that the principal portion of the subsidies is abolished. Insofar as the existence of taxes and subsidies, as we have seen, promotes a certain smoothing of the differentiation in the consumption of material goods by population groups that differ by levels of average per-capita income, it is clear that with the abolition of subsidies for food products, compensated by a reduction in prices for taxable goods that is in sum equivalent, this differentiation grows stronger accordingly. For the least well-off families this (allowing for the retention of the tax on alcohol) will mean a real reduction in income (after the payment of income tax) of 6.6 percent, while for the high-income ones income increases an average of 4.1 percent. The realization of the proposals to compensate for most of the eliminated subsidies through the abolition of the income tax on the working population<sup>7</sup> would have roughly the same effect on income differentiation. Families that are poorly off lose more than 8 percent of their incomes therein, families with a medium level of material sufficiency lose about 2 percent, and the best well-off increase the income at their disposal by 5.7 percent. Both of these versions of compensation, as we see, lead to a roughly identical increase in the inequality, but the first, in my opinion, is better in that it at least permits the preservation of the purchasing power of the ruble and does not devalue savings.

The distribution of total subsidies equally among the whole population leads at the same time to the "flattening" of the extant differentiation of incomes, which threatens a further weakening of incentives for labor: the



least well-off segments of society gain roughly  $\frac{1}{4}$  of their present incomes and the middle ones 1-2 percent, while the high-income ones lose up to 6 percent, as a result of this even distribution. Whence it is understandable that more or less fair compensation, not violating the extant distribution of incomes, should envisage a certain combination of tax reductions (sales taxes or, somewhat worse but simpler, income taxes) and direct monetary payments—even or differentiated according to age and sex criteria. Tentative estimates show that the share of subsidies distributed in the form of monetary payments should total from 25 to 45 percent of their total, and the sales taxes (aside from the tax on alcohol) should accordingly be 94-66 percent eliminated. This would provide each income group with total compensation roughly equal to its losses from price increases for food products, although it is of course impossible to achieve a precise correspondence here<sup>8</sup>.

A rise in apartment rents and the cost of other paid services to the level of their resource-intensiveness, as opposed to consumer goods, does not pose such complex problems in compensating the population for losses,

since the subsidies herein are distributed, as we have seen above, roughly proportional to incomes. The abolition of these subsidies could thus consequently be compensated for (without violations of the extant differentiation of incomes)—either partially or entirely—by a reduction in the income-tax rates (they could be envisaged for the non-working population, for instance, as rent discounts proportional to the size of compensation).

**The effects of base prices on the results of measuring the rates and ratios of economic growth.** Since the prevailing prices for products are in most cases divorced from their actual resource-intensiveness, it can be assumed that the ratios of the utilization of national income for consumption and accumulation in calculations based on those prices are also markedly skewed; its share proves to be overstated in particular due to allowing for the sales tax in valuing the consumption fund, while accumulation is diminished accordingly<sup>9</sup>. To verify this, we have computed the patterns of resource utilization in national income over a series of years as well as corrected with a regard for the actual reproductive expenditures of wholesale prices (Table 2).

**Table 2—Share of Accumulation in National Income in Actually Prevailing Prices Proportional to Expenditures, Percent**

Year	In actually prevailing prices		In prices proportional to expenditures	
	Accumulation and other spending, total	Including increases in fixed capital	Accumulation and other spending, total	Including increases in fixed capital
1965	26.4	14.6	35.7	22.4
1970	29.5	17.9	35.0	22.0
1975	26.4	16.9	30.9	20.9
1980	23.9	15.3	25.1	16.3
1985	26.4	14.1	26.1	13.6

It can be seen from the data presented that the differences in price formation of products for consumer and production purposes actually introduced very noticeable distortions in valuations of the share of accumulation in the past. Today, however, they are not large (it may be said that our valuation of the accumulation norm coincides with the official one within the bounds of precision of the calculations). This is associated with the fact that the distorting influence of the sales tax and the somewhat higher level of profitability of light industry and the processing sectors of the agro-industrial complex as compared to the sectors of heavy industry (i.e. the factors increasing the size of the consumption fund in the calculations based on actual prices) is compensated for to an ever larger extent over the last decade by the relatively low level of profitability of agriculture (the processing products of which form over  $\frac{2}{3}$  of the personal consumption fund) and by increasing retail-price subsidies for food products (today this is almost  $\frac{2}{3}$  of the sales tax), as well as the high—and trending upward (compared to others sectors of the economy)—profitability of the investment sectors, machine building and construction. All of these factors operate in the direction of reducing the valuations of the consumption fund and increasing the share of accumulation in computations using actual prices.

As concerns the change trends of the accumulation norm, calculations in prices proportional to expenditures make it possible to reveal a fact that is concealed when using the actually prevailing prices—its sharp reduction over the last decade, chiefly at the expense of accumulation in fixed capital. It should be noted, however, that this does not yet provide grounds to speak of the corresponding shifts in the patterns of resource utilization in the economy<sup>10</sup>, since depreciation deductions—which, as is well known, are omitted from the computation of national income and accumulation—have a serious distorting effect, along with prices, on the dynamic of the accumulation fund. This leads in practice to the diminishment of the growth rate of accumulation due to the gap in the dynamic of capital investment and fixed capital that took shape with the conversion to the new and lower long-term trajectory of growth in capital investments in the second half of the 1970s, while the growth rate of fixed capital, depreciation deductions accordingly drop to the same level—naturally, gradually over a period corresponding to the average service life of the capital—and only after this is a stabilization of the accumulation norm possible (this gap in the dynamic of capital investment and fixed capital in reality increased even more due to the early withdrawal of the latter from service)<sup>11</sup>.

The calculation of the elements of the gross national product—which includes, first of all, the entire volume of productive investments, and not only that portion of them forming a net increase in fixed capital, and, second, the products of the sphere of non-productive services at full volume (taking into account value added therein), which, according to the methodology for computing national income accepted here, are represented only by

the sum of material expenditures—provides a more correct picture, and one that is more comparable with other countries, of the total utilization of resources in the economy. We are limited to computations of the trends of changes in prices proportional to expenditures (Table 3) and international comparisons in the utilization pattern of the GNP in actual prices, since it is not yet officially published in the USSR.

Table 3—Structure of the USSR GNP in Prices Proportional to Expenditures, Percent

Years	Consumer goods		Services*		Gross investments (capital investments, capital repair and increase in reserves)	Net import-export balance, losses and other spending
	Total including the products of private subsidiary farms	Including purchases in state and cooperative trade	Total including science and administration	Including services to the population		
1965	37.1	30.6	31.3	27.0	30.9	0.7
1970	38.0	32.1	32.2	27.9	29.4	0.4
1975	40.6	36.1	33.1	28.6	29.7	-3.4
1980	41.8	37.6	33.0	27.8	28.0	-2.8
1985	40.5	36.4	32.3	26.8	28.8	-1.6

\*—The value of services to the public here has been revalued to the value of the profits computed according to the same standards as for the sectors of material production and the profitability standard of fixed capital for comparability with the calculations of the GNP structures of other countries (this sort of revaluation is common, for example, in the practice of computing the GNP of the United States when computing the value of leases of real property as part of the housing stock owned by the population, as well as in a number of other cases).

As can be seen from Table 3, a definite growth in the share of the total expenditures of resources supporting consumption was typical of the USSR overall over the 20-year period from 1965-85, especially in the 1970s. It became possible chiefly thanks to changes in the export-import balance due to the rise in world oil prices. The shares of the other basic areas of ultimate resource utilization (investment, services) remain virtually unchanged, although certain shifts occur within these amalgamated positions; the

share of capital investment in gross investment drops, for instance, while capital repair goes up.

How substantial is the difference in the pattern of resource-intensiveness in the USSR and other countries? A comparison of the shares of the GNP going for investment is of the greatest interest from the point of view of evaluating the possibilities for the redistribution of resources in favor of consumption, since only changes in them may be considered a reserve for such a redistribution. These shares were as follows for individual countries and regions (Table 4).

Table 4—Ratio of Gross Capital Investment to the GNP, Percent

Year	USSR	United States	Western Europe	Southern Europe	Japan
1965	30.9	15.3	23.1	21.0	—
1970	29.4	15.1	23.7	24.0	39.0
1975	29.7	14.0	21.5	23.7	32.8
1980	28.0	15.5	21.0	21.5	32.2
1985	28.8	16.0	19.3	18.0	30.7

—Note. Source: (5, p 5; 6, pp 102, 114).

It can be seen that the USSR occupies an intermediate position by share of investment in the GNP, which was larger than in the United States and the European countries with market economies, but less than Japan. The relative dimensions of investments in the USSR, however, are roughly twice as high as for the United States or Japan when allowing for differences in the economic growth rates<sup>12</sup>. Had they been able to have been lowered to, for example, the American level (while

preserving the existing growth rates), the resources for the production of consumer goods could theoretically have been increased by 35 percent through that alone.

The question naturally arises of how trustworthy the values we have obtained for the GNP of the USSR are—they are based, after all, on model prices, whose determination is in turned founded on a series of hypothetical assumptions, rather than on true "market"

prices. The crudest of them is perhaps the use of a single norm for the profitability of fixed capital in calculations of the products of both the productive and the non-productive spheres of activity, while the profitability of, say, such a sector as the rental of housing under the conditions of a real market economy is much lower than the science-intensive types of industrial production whose

development entails entrepreneurial risk<sup>13</sup>. In order to check the results at least to some extent, we computed the pattern of labor expenditures and spending on it analogous to the distribution of the GNP allowing for the accompanying expenditures for interconnected sectors, which naturally removes the difficult problem of forecasting the correlation of profit norms in various sectors (Table 5).

**Table 5—Share of Total Labor Expenditures for Individual Elements of the USSR GNP, Percent\***

	For consumer goods				For services		For investments and other spending
Year	Total	Foodstuffs	Clothing	Durables and other	Total	Paid for the public	
	Distribution pattern of employed						
1966	48.1	35.2	7.3	5.6	25.0	9.0	26.9
1972	43.6	29.8	7.4	6.4	—	—	—
1975	43.3	28.4	7.9	6.9	—	—	—
1980	42.3	27.0	7.8	7.6	—	—	—
1985	42.4	26.5	7.7	8.2	31.1	11.2	26.5
	Pattern of full spending for wages						
1966	35.1	23.9	5.5	5.6	31.0	11.1	33.9
1972	33.4	21.6	5.7	6.1	—	—	—
1975	32.9	20.4	6.1	6.4	—	—	—
1980	32.4	19.7	6.0	6.7	—	—	—
1985	32.8	19.5	5.9	7.4	33.3	12.1	33.9

\*—Without regard for servicemen and their pay.

It can be seen from Table 5 that a reduction in both the numbers of those employed in the sphere of production of consumer foods (especially intensively up to the middle of the 1970s, due to the outflow of labor resources from agriculture and reductions in its overall spending on food production) and the share of wages for them in the overall magnitude of wages has occurred over the span of the last two decades. But while today's distribution of those employed is roughly the same as the utilization pattern of the whole aggregate of national-economic resources (i.e., corresponds to the patterns of the GNP), the share of wages for workers for consumer goods is ultimately much less (even with a regard for the fact that part of the output, and first and foremost agricultural, is produced and consumed on the personal farms of the population), since labor in the sectors of the consumer complex is on average lower paid than others. No more than 1/3 of its total magnitude goes for wage payments overall, either directly or through intersector ties of the consumer goods participating in production. Even if we add in the wages in the sector of paid services and those allied with them, it obtains that over 55 percent of wages today are paid in sectors that are taking part neither directly nor through intersector ties in covering consumer spending. We note for comparison that the share of labor expended in sectors that are directly or indirectly working for the market for consumer goods and services totaled, by our estimate, about 2/3 of the overall value (expressed in both physical and monetary terms) in the economy of the United States at

the beginning of the 1980s, while the material coverage of investments was no more than 23-24 percent (these shares, as we have seen above, are almost identical here).

And finally, we will consider how the distortions in the pricing ratios affect valuations of the economic growth rate. The problem here is that due to the separation of the base prices from product resource-intensiveness, the contribution of certain sectors to the summary indicators of economic development (such as national income or the GNP) prove to be overstated, while others are understated, while the dynamics of those indicators become exceedingly sensitive to structural changes. Although distortions of the rate of economic development associated with this have evidently always existed (insofar as prices for the products of the more dynamic processing sectors of industry are overstated, while those for the products of the fuel and raw-materials sectors and agriculture, with comparatively low rates of development, are on the contrary diminished, the summary indicators of economic growth were overstated<sup>14</sup>), they did not attract any particular attention before 1985, when the rate of increase in the summary indicators fell sharply due to cutbacks in the production of alcoholic beverages<sup>15</sup>. Since this clearly did not correspond to the true state of affairs, after some debate USSR Gosplan and Goskomstat [State Committee for Statistics] adopted the temporary use of a method of correcting the base for reductions in the production and sale of alcohol for the current five-year plan. The hypothetical nature of

this method and, of course, the impossibility of getting rid of the errors always introduced by other taxes and retail-price subsidies, as well as the discrepancies in the profitability of the processing and raw-materials sectors, were obvious, however. They could be eliminated entirely only when calculating the dynamic of the summary indicators on the basis of prices that were proportional to expenditures.

In order to evaluate how seriously the distortions in pricing ratios affect the rate of increase of the two chief measures of economic dynamics that we are using here—national income and the GNP—we computed them according to a uniform technique on the basis of the prices actually prevailing and those proportional to expenditures for one and the same year—1972 for evaluating the rates of the 1970s and 1982 for the 1980s<sup>16</sup>.

The dynamics of the composite indicators, as is well known, can be expressed through prices and rates of increase in the output of individual sectors using two methods: either according to data on the ultimate utilization of the products or according to production data. In the first instance the rate of increase in the summary indicator  $y = \sum p_j c_j$  will be equal to  $y' = \sum p_j' \xi_j + \sum c_j' \xi_j$  (where  $p_j$  are the prices and  $c_j$  are the volumes of the

ultimate production of the product by areas and sector structure;  $\xi_j = p_j c_j / y$  are indicators of the structure of the ultimate utilization of the products (in prices  $p$ ); the first component of this expansion includes all of the inflationary element of growth, while the second gives the element conditioned by the changes in volumes at constant prices. Likewise, in the second method of computation, from the formulation  $y = \sum \delta_i x_i$  there follows  $y' = \sum \delta_i' \eta_i + \sum x_i' \eta_i$  (where  $x_i$  and  $\delta_i$  are the gross production and share in it of net output of added value accordingly;  $\eta_i = \delta_i x_i / y$  are indicators of its sector structure), and insofar as the share of the net output (added value) varies through shifts in the materials-intensiveness of production as well as through prices (the rate of change in the share of net output from this comprises  $m_i'(1 - \delta_i)\delta_i$ , where  $m_i = 1 - \delta_i$  is the materials-intensiveness of gross output, including the depreciation of fixed capital), while the element of the rate of increase in national income (or GNP) conditioned by changes in production volumes will ultimately take the form  $\sum (x_i' - m_i'(1 - \delta_i)\delta_i)\eta_i$ <sup>17</sup>. We are limited to the second method of calculation, since it is based on more trustworthy statistics of production output. Table 6 presents all of the necessary data—the weights and rates of changes in net output (added value) by sectors—and the diagram gives the principal results of the calculations.

Table 6—Calculation of Economic Growth Rates Based on Actual Prices and Prices Proportional to Expenditures, Percent

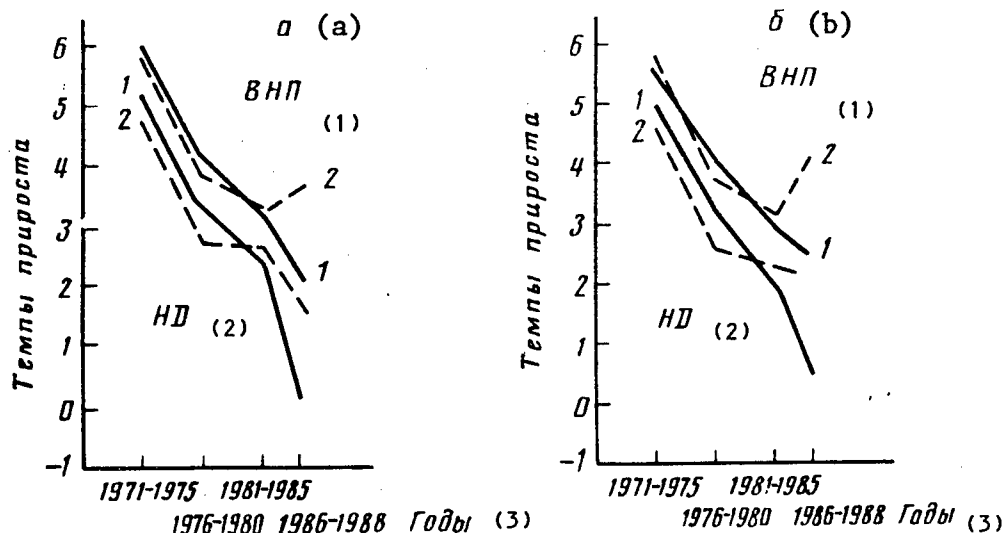
Sector	In the 1970s based on 1972 prices				In the 1980s based on 1982 prices			
	Structure of net output (added value) in prices:		Rate of increase in net output (added value)*		Structure of net output (added value) in prices:		Rate of increase in net output (added value)*	
	actual	proportional to expenditures	1971-1975	1976-1980	actual	proportional to expenditures	1981-1985	1986-1988
1. National income (net output of material production)								
Industry	52.2	40.5	6.7	4.2	50.3	38.0	1.9	-0.5
			7.5	4.0			2.7	3.5
—ferrous metallurgy	2.2	2.4	3.5	-0.2	2.0	2.0	-0.3	1.9
—non-ferrous metallurgy	1.5	1.3	6.0	-0.6	1.6	1.2	-0.1	1.4
—coal	1.4	2.2	2.4	-5.8	0.9	1.9	-9.3	-1.1
—oil and gas	3.9	1.2	6.4	2.9	5.2	2.2	-2.3	-4.6
—electric-power engineering	1.9	2.9	5.7	5.2	1.9	3.3	-0.0	-0.1
—machine building	15.7	15.6	11.2	7.8	15.6	14.5	6.1	6.5
—chemical	2.9	2.4	12.9	5.5	2.5	2.1	4.8	5.8
—timber	2.8	2.9	3.0	0.3	2.4	2.5	3.2	4.3
—building materials	2.4	2.7	6.2	0.1	2.2	2.1	2.7	3.7
—light industry	9.1	3.9	2.6	4.3	8.4	3.4	2.0	3.3
—food (without alcohol production)	2.0	3.0	5.6	2.9	0.2	2.4	2.8	4.2
—alcoholic beverages**	6.3	0.2	3.4	3.4	7.4	0.3	-2.9	-22.7
Agriculture	19.8	27.9	-1.8	-4.5	16.1	25.5	0.6	-0.6
Construction	11.4	13.2	6.5	2.8	10.2	11.6	3.8	2.3
Transport and communications	6.1	8.6	7.3	4.3	6.2	7.9	2.0	2.4
Domestic trade	6.7	6.8	6.4	3.8	6.7	6.3	3.2	4.1
Foreign trade	3.9	3.0	10.9	6.2	10.4	10.6	5.9	-2.2

**Table 6—Calculation of Economic Growth Rates Based on Actual Prices and Prices Proportional to Expenditures, Percent (Continued)**

Sector	In the 1970s based on 1972 prices				In the 1980s based on 1982 prices			
	Structure of net output (added value) in prices:		Rate of increase in net output (added value)*		Structure of net output (added value) in prices:		Rate of increase in net output (added value)*	
	actual	proportional to expenditures	1971-1975	1976-1980	actual	proportional to expenditures	1981-1985	1986-1988
			9.1	6.2			5.8	-2.2
Material production overall	100.0	100.0	5.2	3.2	100.0	100.0	2.4	-0.1
			4.7	2.7			2.6	1.6
<b>2. Gross national products (added value)</b>								
Material production	85.6	74.2	5.7	3.9	85.6	76.3	3.1	1.4
			5.4	3.6			3.4	2.8
including:								
—industry	44.7	31.8	7.1	4.8	43.7	31.4	2.9	1.0
			8.0	5.0			3.8	4.3
—ferrous metallurgy	2.1	2.0	4.4	1.4	2.1	1.8	1.9	3.0
—other metallurgy	1.4	1.0	6.5	1.1	1.4	1.0	1.8	2.7
—coal	1.4	1.7	4.2	-2.7	1.0	1.5	-2.4	-0.7
—oil and gas	3.3	1.1	6.9	4.0	4.4	1.9	0.3	1.1
—electric-power engineering	2.0	2.4	6.3	5.4	2.1	2.8	2.3	2.5
—machine building	13.2	12.3	11.4	8.2	13.4	11.7	6.5	6.7
—chemical	2.6	2.0	12.6	6.1	2.5	2.1	5.1	5.3
—timber	2.5	2.2	3.8	1.7	2.1	2.0	3.8	5.6
—building materials	2.3	2.2	6.9	1.9	2.1	1.9	3.2	4.4
—light industry	7.2	2.5	2.7	4.4	6.5	2.4	2.2	3.4
—food (without alcohol production)	1.9	2.3	5.9	5.9	0.6	2.0	3.2	4.3
—alcoholic beverages**	4.9	0.2	3.4		5.5	0.2	-2.9	-22.4
—agriculture	16.8	20.0	-0.8	0.8	14.2	19.1	1.6	1.2
—construction	9.6	9.3	7.1	3.4	8.6	8.5	4.2	3.5
—transport and communications	5.9	6.3	7.5	4.8	6.1	5.8	3.2	3.4
—domestic trade	5.6	4.8	6.9	4.0	5.5	4.6	3.4	4.0
—foreign trade	3.0	2.0	10.9	6.2	7.7	6.9	5.9	-2.2
			9.1	6.2			5.8	-2.2
Non-productive sphere	14.4	25.8	7.9	5.1	14.4	23.7	3.9	6.2
			7.0	4.4			2.6	6.3
including:								
—housing and municipal and consumer services	2.4	10.9	5.3	2.3	1.8	9.5	0.9	6.0
—passenger transport and communications serving the public	2.8	3.3	8.7	5.7	2.7	3.1	4.5	8.6
—education, health care and culture	5.5	8.2	7.9	4.8	5.2	7.1	3.1	6.1
—science	1.9	2.1	9.1	6.4	2.3	2.6	5.0	6.6
—administration	1.7	1.3	8.9	6.6	2.4	1.4	3.7	3.5
National economy overall	100.0	100.0	6.0	4.0	100.0	100.0	3.2	2.1
			5.8	3.8			3.2	3.6

\*—Two rates are given for the composite positions, including the output of foreign trade, the first of which (upper) is computed on the basis of the actually prevailing prices, and the second (lower) on the basis of prices proportional to expenditures.

\*\*—The rate of increase in the production of alcoholic beverages is computed according to data on consumption (in liters of absolute alcohol); it has been hypothetically assumed that the consumption volume for 1988 remained at the level of the preceding year.



Growth rate of national income (NI) and gross national products (GNP) calculated on the basis of actual prices (1) and prices proportional to expenditures (2): a—with a regard for, and b—without regard for, income from foreign trade.

Key:

1. GNP

2. NI

3. Years

The fact that the values we obtained for the increase in general economic indicators is lower than the official values, even though we are proceeding from the same data on increases in output by sectors, calls attention to itself first and foremost. This especially relates to recent years: even the rates of increase in national income corrected with a regard for altered receipts from foreign trade follow overall the trend that had taken shape in the two preceding five-year plans, and we can speak of a certain acceleration of growth only apropos of the dynamic of the GNP. The most important causes of this divergence (aside from the ones that were mentioned above—a different base for comparable prices and an insufficient regard for changes in fuel and transport expenses in official calculations) evidently consist of the following: we are using, first of all, an index of the changes in alcoholic-beverage production in physical terms, while the official computations include the much higher indicator of growth in monetary terms; second, the share of depreciation in the overall volume of production was reduced appreciably twice over the period under consideration with the conversion to the new base for comparable prices, which led to an acceleration in the rate of net output of individual sectors and national income overall (that is what happened in the 10th Five-Year Plan due to the conversion to computations based on the higher 1973 prices instead of the comparable prices of 1965 that had been employed up until that time; an analogous effect was triggered in the current five-year plan with the conversion to 1983 base prices). And, finally, the third cause is associated with the method of totaling the growth rates of output in individual sectors itself: we employ one and the same weight for this over the course of an entire decade, when as a matter of fact they change. In practice, these changes are

not large, and the error that arises in connection with them could be ignored if it were not for one important exception—the share of receipts from foreign trade, which rose rapidly right up until 1985, and then began to fall just as rapidly. Our valuations of the contribution of foreign trade to the dynamics of the general economic indicators in both the one situation and the other prove to be understated as a result. The conclusion could be drawn in general that although the method we employ is inclined to understate the dynamic of the indicators accounting for income from foreign trade, in other regards it provides a more realistic picture of economic growth (if, of course, the question of the reliability of the growth rates of output at the level of individual sectors is not touched on<sup>18</sup>).

A second observation relates to valuing the contribution of the non-productive sphere to the dynamic of the development of the national economy overall. Added value in the sphere of paid services for the population, including in housing, was determined in the same manner as for the sectors of material production—the difference between the sales value and the current material expenditures—and for all other (free) services, including to the public, by the dimensions of the wages paid and the depreciation of fixed capital, in the technique that has prevailed since 1988 for computing the GNP of the USSR; the weights of the service sectors in the GNP in actual prices presented in Table 6 correspond to this approach. Since the sphere of paid services is unprofitable overall and a considerable amount of the services are rendered for free, these weights, as we see, differ quite substantially from the weights computed using base prices proportional to expenditures. In practice, however, this is not yet having any appreciable

effect on the overall dynamics of the GNP, since the rates of development of the productive and non-productive spheres of activity were close overall<sup>19</sup> (moreover, at lower rates of development of the services sphere compared to material production, a regard for its output in the GNP at a diminished valuation leads to more favorable dynamics for that indicator). The redistribution of capital investment in favor of the non-productive sphere, and especially the expansion of the rate of housing construction, in this approach proves to be a factor—however paradoxical it may be—slowing GNP growth. A more correct reflection of the dynamics of the ultimate results of economic activity in it could require a revaluation of the net income of the non-productive sphere with a regard for the fixed capital utilized therein in the future.

A third and last observation on the results of the calculations relates to accounting for the products of foreign trade. They are determined as the sum of the customs revenue from exports  $eX^{fc} - X$  and imports  $M - eM^{fc}$  or, the same thing, as the net balance of receipts from foreign-trade operations according to balanced turnover  $(M - X + e(X^{fc} - M^{fc}))$  where  $X$  and  $X^{fc}$  are exports in domestic and foreign-currency prices respectively (the analogous values  $M$  and  $M^{fc}$  are used for imports);  $e$  is the conversion factor of foreign-currency rubles to domestic ones (the hypothetical rate of exchange). Whence the contribution of foreign trade to the rate of increase in national income or the GNP can be valued at  $\eta^x X' + \eta^m M'$ , where  $\eta^x(\eta^m)$  is the share of customs revenue from exports (or imports) in the overall magnitude of net output or added value;  $X'(M')$  is the rate of increase in exports (or imports) in comparable prices (for simplicity we are ignoring the differences between the rates of their increase in comparable domestic and foreign-trade rubles that could arise due to shifts in trade patterns). We saw above that the dynamics of the general economic indicators taking into account customs revenue are quite sensitive to the competitive market conditions of foreign trade, and it may be assumed that this is associated with distortions in the structure of domestic prices, due to which the overall magnitude of customs revenue is overstated. It can be seen from Table 6, however, that its relative size changes little with the conversion to prices that are proportional to the average costs of production. And what really noticeably skews the valuation of the contribution of foreign trade to the economic growth rate is the accepted method of determining the conversion factor. It is established at the level of the average currency efficiency of exports, if the foreign-trade net balance in currency prices is positive, and at the level of the currency efficiency of imports if it is negative accordingly<sup>20</sup> (8). It is easy to understand that the rate of increase in foreign-trade output (customs revenue) in comparable prices will be equal in the first case to the rate of increase in imports, and in the second case in exports. This leads to a quite uncertain result in situations where imports are falling, exports are growing and the net balance of trade in currency prices is close to zero; this situation is typical of the contemporary state of

affairs. These distortions could be lessened, in my opinion, if we determine the conversion factor according to the maximum currency efficiencies of exports and imports (i.e. according to the efficiency of self-contained types of exportable and importable products) rather than according to average ones, wherein they should be close to each other. The dynamics of foreign-trade output in that case will be determined by the weighted sum of the indicators of increases in exports and imports in comparable prices and depend the least on competitive market fluctuations in world prices.

#### Footnotes

1. An additional increase in the overall volume of goods and services sold to the public through such replacement per ruble of consumer spending will be equal to  $p_i/p_j - 1$ , where  $p_i$  is the resource-intensiveness of the type of consumer good being replaced and  $p_j$  is the resource-intensiveness of the consumer good doing the replacing.
2. The corresponding excess describes the usual size of the essential financial resources including both direct subsidies to unprofitable sectors producing goods and services for consumer purposes and the financing of capital investments in such sectors over and above their intrinsic accumulations, as well as the expenditures in attendant sectors. If the resource-intensiveness is accordingly less than the unit value, the difference is the complete magnitude of the sales tax in the consumer spending, which aside from an intrinsic tax can also take shape from a level of profitability in the wholesale prices established for the products of a given sector that are higher than those essential for self-financing.
3. Although the calculations were performed according to data for the detailed intersector balance sheet for 1982 (and the procurement prices have been raised since then for agricultural products and the estimated prices of construction and installation work, as the result of which the overall level of wholesale prices rose by 2 percent and the resource-intensiveness of consumer goods increased accordingly), there were no major changes in retail prices over that time (except for alcoholic beverages). It may thus be asserted that the data cited correctly reflect overall the correlations that exist today in the resource-intensiveness of various goods and services.
4. According to calculations, the population group with an income over 200 rubles a month per family member receives subsidies for food-product prices that are 7-8 times more than those with an income of less than 50 rubles per capita. And even though the high-income families pay 5-11 times more than the low-income families in sales tax for clothing, 12-15 times for shoes, 10-12 times in cultural and consumer goods and 8-9 times more for furniture, a positive net balance of subsidies and sales taxes is typical of the high-income groups of the population: the difference is 1.5 times more than for the low-income groups (without allowing for alcoholic beverages and tobacco).

5. This is explained by the fact that the less well-off families buy 55 percent of their meat outside the state retail network, including 40 percent at market, while the opportunities for acquiring meat products at state prices expand, as a rule, with increases in income.

6. An allowance for alcohol naturally displaces these correlations in the direction of increasing the share of taxes in spending. A rough balance of excise taxes and retail-price subsidies is observed in this case only for the consumption patterns of low-income families, while the net excise totals over 10 percent of their purchases of goods for middle-level families and about 20 percent for well-off ones.

7. See (3), where just this variation is considered.

8. The high-income segments of the population (including through the comparatively lesser savings sufficiency) gain more with a correlation of monetary payments and tax reductions according to the first variation for compensating losses, and the low-income ones do in the event the second is utilized.

9. This assumption is also expressed in (4) and the conclusion is drawn that the accumulation norm in this country is in reality rising.

10. It is all the more impossible to judge such shifts comprising the dynamics of groups A and B of industry or the growth rates of the first and second subdivisions of social production (see (4)). These indicators include intermediate expenditures in whose ultimate utilization substantial shifts occur. The rapid growth in heavy industry in 1960-85, for example (with a drop in the share of group B from 27.5 to 25.2 percent) still says nothing of the shifts in the correlation between consumption and accumulation, since the share of total expenditures of fuel-and-power resources for routine personal consumption over that period increased from 36 to 43 percent and structural materials and chemical and timber products from 24 to 38 percent respectively, while the share of productive capital investments in the ultimate utilization of those resources declined: from 27 to 19 percent for the fuel-and-power resources, and from 43 to 28 percent for structural materials and chemical and timber products.

11. When we say that allowing for depreciation reduces the rate of accumulation of fixed capital, what we have in mind, naturally, is their gross accumulation (per the full initial value). If we are speaking of accumulation in its intrinsic sense, i.e., an increase in the net (residual) value of the capital, then it is most likely overstated both in official calculations and in ours due to an underestimation of depreciation conditioned by the process of inflationary price increases for the capital introduced. A correction factor for the magnitude of the depreciation that makes it possible to allow for the difference in the unit cost of capital put into service at differing times with a rate of annual price increases of  $i$ , increase in start-ups  $\chi$ , service life  $\theta$  and renewal factor  $\nu$  will comprise  $\nu(1+i-\chi)((1+i-\chi)^\theta - 1)/(i-\chi)$ . If we take a rate of inflationary price increases for the capital equal to 4 percent, then at average

rates of increase in start-ups of 6.1 percent over 1960-87, the contemporary renewal factor of 7.5 percent and a service life of 21 years, the corrective factor for depreciation will be equal to 1.26. The value of accumulation for fixed capital in the middle of the 1980s should have been decreased from 13.6 to 9.9 percent of national income utilized allowing for this. We note that a similar overstatement of the consumption of fixed capital (as well as the value of reserves) is always made when computing national income in the statistics of foreign countries.

12. Having in mind the share of investments in the GNP going for each percent of its increase (growth capital-intensiveness). It was computed proceeding from the average annual rates of increase of the GNP in the 1980s of 2.1 percent in the USSR, 2.6 percent in the United States and 4 percent in Japan. Our evaluation of the dynamics of the USSR GNP was made based on comparisons of the levels of national income of the USSR and the United States and the rate of its increase in the United States as cited in the USSR Goskomstat yearbooks, and computations of the shares of material production and the non-productive sphere in the GNP of the USSR (according to the magnitude of added value). We note that close values for the shares of investments in the GNP and the economic growth rate of the USSR are provided by alternative studies performed by the U.S. CIA at the request of the Joint Economic Commission of Congress (see, for example, (9)).

13. The values obtained for the structure of the USSR GNP are also not entirely comparable with the analogous computations of other countries because the latter are performed on the basis of retail prices reflecting excises and subsidies, which naturally overstates the dimensions of consumer spending somewhat compared to investments. The net balance of excises and subsidies in the United States in 1987, for example, totaled 8.6 percent of the GNP, and the share of investments would have risen to 16 to 17.6 percent there had it been omitted from consumer spending.

14. I emphasize that I am speaking in this case of distortions in the rate of economic growth associated exclusively with pricing ratios, and not concerning the problem of the veracity of the valuations of growth in output at the level of individual sectors (hidden inflation).

15. The rates of increase in national income produced computed according to the traditional methodology totaled just 1.6 percent in 1985 and 2.3 percent in 1986. They increase to 2.5 and 4.1 percent respectively with corrections to the base for production cutbacks above and beyond the plan and for the sale of alcoholic beverages.

16. USSR Goskomstat uses a different base for comparable prices (1973 prices for computing the rates for 1976-85 and 1983 prices beginning in 1986), while I have been forced to adhere in selecting base prices to the years of compilation of the expanded intersector balance sheets. This already conditions somewhat of a divergence between the values of the summary indicators based on the actual



prices and the official data. This divergence, however, will not be too large in view of the absence of fundamental differences between the pricing proportions of those years.

17. It is namely an undercounting of changes in the materials-intensiveness of production (in the area of expenditures of trade and transport services) that acts as one of the chief causes of the quite substantial disparity in the official values for the dynamics of national income produced compared to that utilized (for more detail on this see: (7, pp 50, 51)).

18. Although here, as has already been noted, we will not be occupied especially with this question, it is possible to single out at least one sector—machine building—where these rates are quite patently overstated due to the mechanism of price formation (the determination of the profitability of standards to expenditures), which permits an increase in net output, as well as gross, through growth in intra-sector turnover. Its share of the total material expenditures of machine building doubled over the period from 1960 through 1985—from 30 to 59 percent—while the share of basic materials was also reduced by almost half—from 48 to 26 percent. The contribution of these factors alone to the rate of increase in sector output totaled 1.8-2.0 percentage points a year (as much as the growth rate of total labor expenditures and fixed capital here are less than than the rate of increase in added value). The gap between the planned growth rates of machine-building output from that possible according to the conditions of resource supply increased even more in the 12th Five-Year Plan and reached 3-4 percent a year. This is evidently one of the reasons that they were unable to achieve the planned rate at the beginning of this five-year plan under the conditions of somewhat of a tightening of price and quality control in machine building. It could be added to this that the growth rate of machine-building output in the majority of the industrially developed countries according to value indicators, as a rule, is roughly the same as for industrial production overall, or just inconsiderably more than it (the output of machine building in the United States over the period from 1960 through 1987, for example, increased by 3.2 times in the face of growth in industrial production of 2.6 times, while here they were 12 and 5.3 respectively). A similar gap in the growth rate of output from expenditures, albeit on a lesser scale, was also observed in the other processing industries (in light industry, for example, it totals a value on the order of 1.2 percent a year, and in construction 0.4 percent). This explains, in particular, the difference between the figure we obtained for GNP growth in the 1980s and the lower one cited earlier that was computed on the basis of international comparisons.

19. We have computed the dynamics of the volumes of non-productive services according to the total expenditures of labor and fixed capital here (the latter are counted as the sum of depreciation and profitability according to a norm equal to the sectors of material production). The values obtained probably overstate the dynamics of the physical volume of the services, and probably to an even greater extent than occurs in material production, where the growth rate of a number of sectors reflects changes in

production volume quite accurately nonetheless. The use of representative descriptions (growth in housing stock, number of hospital beds etc., as is done, for example, in the American study of economic growth rates in the USSR mentioned) for this, however, would lead in this case to completely incomparable indicators of the dynamics of the productive and the non-productive spheres of the economy.

20. This is evidently motivated by the fact that "excess" exports are removed, as it were, from the net balance of receipts from foreign trade in domestic prices in the first instance, and "excess" imports in the second instance.

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## AGRO-ECONOMICS, POLICY, ORGANIZATION

### Conversion: Land Returned to Agricultural Use

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12 Jan 90 First Edition p 2

[Interview with Lt Gen N. Gryaznov, chief of the Main Billeting Directorate of the USSR Ministry of Defense, by Maj I. Ivanyuk: "Returned to the National Economy"]

[Text] More than 15,000 hectares of land freed for peaceful labor; instead of a missile base... a cheese plant; without neglecting the nation's defense interests...

The conversion of military production and the reduction of the Armed Forces have an external, striking aspect: combat vehicles which have found peaceful uses, consumer goods produced at defense plants. There is also a little-noticed aspect: the return to the national economy of that which was recently under the control of the army or navy.

Lt Gen N. Gryaznov, chief of the Main Billeting Directorate of the USSR Ministry of Defense, tells about some aspects of this work.

[Ivanyuk] Nikolay Viktorovich, the territory behind the gates depicting the red stars have always seemed something of a forbidden zone to strictly civilian people. The times are changing, however. As a result of the current reduction of the Armed Forces, it is only natural to ask whether some of the land allocated to the Ministry of Defense will be returned to national economic use: for cultivation, pasturage, housing.

[Gryaznov] I want to clarify this at the outset so that no one has the impression that the Ministry of Defense has in effect shut itself off from everyone and constitutes a sort of state within a state with respect to land use. The laws governing this matter are the same for all departments. The land codes of the republics do differ, to be sure, but extremely insignificantly. And land is made available for army and navy needs ordinarily at this level. In the cities these matters are decided in most cases by the city ispolkoms. This is a constant process, and a two-way one. And it is not at all rare for land to be returned to agriculture and to city authorities.

As of today the Ministry of Defense has 42 million hectares at its disposal. It should be noted that three quarters of this area is taken up by large ranges. Naturally, worthless land and nonarable land, land of little value, was primarily selected for them. They are ordinarily in regions with harsh climatic conditions: in the permafrost zone, in semiarid areas and deserts. In such places as the environs of Semipalatinsk, at Plesetsk, Baykonur and Kapustin Yar, for example.

On the other hand, around two million hectares of land designated for the Ministry of Defense has been put to use—and with full effectiveness—in agriculture. Military sovkhozes, among other things, are located there,

which make a perceptible contribution to the food supply for the Armed Forces.

Nonetheless, we found additional possibilities for turning around 1,000 hectares over to the national economy in 1988 and more than 15,000 hectares last year.

[Ivanyuk] Two questions immediately come to mind: At the expense of what was this done? For what purposes will these areas be used?

[Gryaznov] Part of the land was freed following the disbanding of military units. It would be difficult to expect a rapid return from them, to be sure. If a missile battalion is located in the woods, for example, ordinarily a long way from populated areas, it is not a simple matter even to reach it.

The transfer of land to the national economy presently involves the territories of ranges—more precisely, the so-called "buffer" zones around them. This is not being done to the detriment of security or the health of the people, of course, and includes essential steps to protect the environment.

For example, a section totaling 2,000 hectares has been transferred in Armenia, on which the tuff so essential for construction in the earthquake zone will be worked. More than 500 hectares of land was turned over to local soviets of people's deputies in 1988-1989 alone for setting up horticultural societies. A considerable area has been freed for the construction of housing, kindergartens and boarding schools.

[Ivanyuk] I imagine that most of the readers think of this as land deformed by tank tracks and vehicle wheels, land covered with ruts and pits. How else could the territory of a former range appear?

[Gryaznov] That is possible. But these fears—pardon me for the unintentional pun—are groundless. In every case in which this is necessary a land recovery plan is compiled. It is ordinarily prepared by a specialized civilian organization with trained personnel. If there was pasture on the land before it was turned over, the military unit must "release" pasture to the local authorities; where there was a meadow, it must be a meadow. The fertile layer of soil must be restored wherever this is required.

The simple jobs are performed by the military, but it is sometimes necessary to enlist contract organizations to perform large-scale leveling and reclamation work. A great deal of concern is shown for the ecology. The land must be returned to its "peacetime" life in its original condition, as it were.

Unfortunately, there are deviations from these rules. We sometimes receive messages of alarm from local authorities. In every case we immediately take the steps necessary to put things into order.

[Ivanyuk] And what becomes of the buildings and installations located on the areas turned over to the national economy?

[Gryaznov] These are also turned over to the national economy. The Cherskiy Sovkhoz located in Pskov Oblast, for example, recently acquired full control over everything remaining from a former missile base—that is, not only more than 400 hectares of land but also hangers, heating garages, barracks, vegetable storage facilities and many other structures. It would have cost the kolkhoz millions of rubles to build the housing, production buildings and the boiler-room and to build the roads if it had set up the new division in an empty area. Just because of this, according to the specialists, it will be possible within the near future to increase milk production by 20%, to fatten twice as many hogs and to set up a cheese plant with the facilities acquired.

Right now, for example, work is underway on the transfer of two churches located on the grounds of a military sanitarium in the settlement of Marfino near Moscow to a religious community. It has been decided jointly with the Rovno City Ispolkom to return the buildings of a former church (kostel) located within the city limits to believers of the Roman Catholic faith. Several other cultural facilities have already been turned over for their intended use in Ashkhabad, Pushkino and other cities.

Naturally, it is difficult in every case to monitor what happens to this or that facility or section of land turned over to the national economy—and that is not even our job. I would like to see it all benefit the people, however. It belongs to all of our people, after all.

This is not always the way it turns out, however. Last year, for example, we completed a new building for a rayon billeting unit in the Moscow area. The city community wanted it to be used as a children's general health clinic. That sounded like a good thing, so we agreed. Six months have gone by, however, and not only is there no medical facility functioning there; no preparatory work is being performed. The vacant building is gradually becoming useless.

I want to say in conclusion that there have also been excessively persistent requests and even ultimatums to release this or that building or territory. As I have already stated, when this is possible we do our part. Let us not forget, however, that the locations of military units are not decided on the basis of someone's whim but based on the needs for defense development and on our homeland's security interests.

#### **Stroyev Lauds Perestroyka Gains, Warns Against Conservatives**

904B0207A Moscow SELSKAYA NOV in Russian No 4, Apr 90 pp 1-2

[Article by Yegor Semenovich Stroyev, secretary of the CPSU Central Committee and deputy of the USSR Supreme Soviet: "Perestroyka: The Ideas and Reality"]

[Text] Five years ago, in April 1985, the CPSU Central Committee Plenum announced the policy of a radical renovation of the country. The word "perestroyka" took on a new meaning, became the most popular word in our lexicon, and is understood throughout the world without translation.

Just what changes have taken place in the life of our society during these 5 difficult, intense, and dramatic years? How much of what was planned have we been able to do, what have we had to abandon, and what remained only in appeals and slogans?

On the eve of the fifth anniversary of perestroyka, the editorial board asked people of various professions and with various experience to answer these and other questions. The assessments are quite different and reflect a varied spectrum of opinions and feelings. They reflect optimism, courage, perspicacity, uncertainty, pain, and hope... There is just no place for indifference.

Beginning perestroyka, we all dreamed that life would improve radically in a short period of time, above all in matters of food supply. There is progress, although not as appreciable as we would like. The average annual production of agricultural products during this time increased by 20 billion rubles or by more than 10 percent compared to the 11th Five-Year Plan (in constant prices). The output of food products in the processing sectors of industry increased by 13 percent.

In the difficult economic situation, more than 30 oblasts have been able to organize work in such a way that they not only successfully coped with the deliveries of agricultural products to the centralized funds, but also noticeably improved the food supply for their population. People have really felt the results of perestroyka. Particularly noticeable changes are seen in Belgorod, Voronezh, Lipetsk, Orel, Ryazan, and a number of other oblasts of Russia, as well as in Belorussia, in the Ukraine, and in the Baltic republics. Here they have become more actively involved in implementing the new agrarian policy developed by the party in recent years and have created the economic and social prerequisites for the peasants to be able demonstrate initiative and develop as masters on the land. As a result, the average annual rate of production of agricultural products in these regions increased 1.3- to 1.5 fold.

Experience and life itself are convincingly proving the great advantages of the new forms of economic management—leasing and cost-accounting leasing relations of the production elements at kolkhozes and sovkhozes, independent family farms and cooperatives, and peasant farms. Having embarked on this path, tens of thousands of labor collectives have achieved a considerable increase in labor productivity and product output in short periods of time. That is why the party organizations, soviets of people's deputies, and economic bodies must in every way possible support and develop the restructuring of production relations in the countryside, relying the laws on cooperatives, land, ownership,

leasing, and others. This will make it possible to accelerate substantially the resolution of the food problem.

And acceleration here is extremely necessary, for the achieved level of production does not provide the country with a normal supply of food and agricultural raw materials. Per capita consumption of meat, milk, vegetables, and other products is slowly increasing, and the increase in food goes mainly to cover the annual population growth, not to improve the supply. Moreover, the situation is made more complicated by the inflation processes in which wages are increasing faster than production.

The base for storing and processing food products lags behind seriously; here the power-worker ratio remains low—up to 70 percent of the operations are performed manually. As a result, a considerable portion of the products do not reach the table of the workers. That is why large sums of money are now being allocated for creating and modernizing the processing material and technical base.

The problems of social and spiritual revival of the countryside and improving the demographic situation remain very acute and pressing. Their resolution has been put off for too long for various reasons, which, as we know, has resulted in the rural areas deeply and chronically lagging behind the urban areas in being provided housing and medical, consumer, trade, and cultural services. Tremendous efforts are now required not only to stop the outflow of the rural population, but also to turn this process in the opposite direction and revive the villages that have become unpopulated and reached a state of neglect.

Non-standard approaches are required not only in the social sphere, but also in the forms of managing production itself. It is important to study the experience of the past in developing uninhabited lands and to take into account the experience of other countries to actually ensure that we begin to think about the people living on the land. This is the essence of the party's agrarian policy at the current stage.

Large material and financial resources are being directed at implementing the program of social reconstruction of the rural areas. These resources exceed the funds allocated earlier by a factor of 1.5. And in a number of regions this is already bringing an appreciable return. People have begun to return to their native places and are bringing villages back to life.

This is especially noticeable in places where the problems of supplying gas, electricity, and hot water to the villages are being resolved simultaneously, road construction is being actively accomplished, transportation links are being organized, and new vocations are appearing. This work is important not only in a material context, but also in a spiritual context. After all, we have largely lost the ties of peasant generations and the feelings of kindness and charity for which rural people were always noted. It is precisely with the land that the

revival of the vital strength of nations has always begun, and we must not forget this.

The many years of stagnation in all spheres of our society did not bypass the rural areas; like everywhere, the stagnation gave rise to "special" production relations. The fact that everyone is in favor of perestroika does not at all mean that everyone has rolled up their sleeves and begun working for it. To this day we encounter attempts to solve problems not by creating and multiplying public and personal wealth, but by dividing up and redistributing on principles of equalization.

This "red eye disorder," as the Chinese say, has so infected our society that many people are willing to continue to vegetate as long as they do not have to "work hard" and do not have to assume the burden of responsibility. It was not by chance that the Appeal of the Second Congress of People's Deputies to the Citizens of the USSR emphasized the main thought that no laws or resolutions, not even the most perfect ones, can solve the country's burning problems if they are not followed by the real actions of every citizen. Only through common labor and common efforts will we be able to have a sufficient amount of food products and goods and ensure the welfare of each and every person. We cannot expect gifts from anyone.

We have suffered through perestroika in the literal sense of the word and that is why we should take care of it and protect it from the slanders of conservatives, various demagogues, and ill-wishers who shout from the rooftops that perestroika is spinning around and that things are getting worse in the country. But let us honestly ask ourselves: Worse compared to what? How did society feel before April 1985? Worse, certainly. And what would we have now if not for perestroika?

Here it is very appropriate to recall the words of M.S. Gorbachev in his report at the extraordinary December 1989 CPSU Central Committee Plenum that there is clearly an underestimation of what perestroika has already accomplished: "Yes, the country remains in a difficult situation," he said. "No, perestroika has still not yielded appreciable results in a number of vital problems. But is what it has produced—freedom of self-expression, creative activity, and initiative, including in the political sphere—really so little? Really, quite recently were we not choking from the difficulty in breathing in the atmosphere of stagnation and paralysis of thought and deed? Was it not our fondest dream to have a gulp of freedom?"

These are very true words. Perestroika has already created the beginnings which will pay for themselves in the near future, including in the economy, in resolving the food problem. I am confident that the pace of the reforms will pick up, the welfare of the Soviet people will improve, and along with this will come a faith in the future, in the bright ideals of socialism.

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## MAJOR CROP PROGRESS, WEATHER REPORTS

### Working Toward Abundant Crops In The Ukraine

#### 1989 Successes, 1990 Efforts

904B0193A Moscow SELSKAYA ZHIZN in Russian  
4 Mar 90 p 2

[Article by A. Tkachenko, chairman of the Ukrainian SSR Gosagroprom: "Analyzing the Year's Results: Field and Grain"]

[Text] Many farms in the Ukraine are attempting to develop grain growing as much as possible.

Experience in this country and abroad is convincing. Stable grain harvests can only be obtained through a maximum intensification of the industry and an increase in the efficiency of agriculture. But what kind of efficiency can one talk about in our republic when the optimal structure of farmland has been disrupted, proper crop rotations not followed, and other important agrotechnical requirements not fulfilled. With each year soil fertility has fallen, phytosanitary conditions have worsened, and economic injury levels to crops by pests and diseases have been exceeded. Of the 16 million hectares set aside for grain production, 10.5 million hectares were planted with winter wheat, 2.5 million more than is stipulated in scientifically tested crop rotations. And each year they overplant by approximately the same number of hectares.

Radical measures were needed. But a weak material-technical base and the system of mandatory planning have held things back. In these conditions there was only one choice; to strike a course towards an increase in the efficiency of the agricultural service. During the first stage existing crop rotations were examined and improved, agrotechnological offices and laboratories were created and thorough training of personnel was initiated with the participation of the land tenure service. The effort dealt with each individual machine operator, each field, and elaborated plans for growing crops taking into account the particular characteristics of the production areas.

The long-term scientific and technical "Agrokompleks" program was approved. Its realization helped increase the volume of organic fertilizer applications and reduce the areas of acidic soil. Soil maintenance, moisture conservation technologies, and minimal tillage have received wide dissemination. Blade and chisel-type implements, wide-sweep, and combined tillage equipment are beginning to be used much more widely. As the supply of material-technical resources improved, naturally, intensive technologies of grain crop production were developed. Last year land devoted to these crops increased to seven million hectares.

A system of integrated (flexible) pest management for protection against weeds, insect pests and diseases was

organized. For this purpose preventative measures have been fundamental: improvement of seed quality through incrustation, border and spot treatments, low-volume and ultra low-volume sprays, banded herbicide applications. The use of pesticides was eliminated in the cultivation of grain used to prepare baby and dietary food.

In zones of inadequate moisture special attention was given to land reclamation projects which helped to raise yields here by four centners per hectare.

An improvement in seed production and its conversion to an industrial basis also had a positive effect. Almost half of the grain fields are planted with new varieties and hybrids each year. Farms are converting to the cultivation of winter wheat varieties with potential yields of 75-80 centners per hectare. Using the contract method 340 seed production facilities and stations have been constructed with an total capacity of 900 thousand tons.

Machine operators have had their input. Even in complex weather conditions they completed most field and harvest work competently and on schedule. Repair shops for planters and combines have been created at almost all collective and state farms. At repair-transport enterprises a number of items, whose manufacture has been discontinued by industry or which are not available in necessary quantities, are produced. These include shanks, plow extensions, rollers for planters, sweeper-harrows and other types of harrows, fertilizer spreaders.

The "40 Years Since October" collective farm in the Vasilkovskiy rayon of the Kievskaya oblast can serve as an example of the highly effective utilization of intensive technology in grain production. Last year its overall yield of winter wheat was 81.8 centners per hectare, of peas 52.9, of spring barley more than 50 and of corn 106 centners. We have hundreds of such farms and that's why grain production plans on the whole were fulfilled throughout the republic during these four years of the five year plan. Last year was especially gratifying when for the first time 53.2 million tons were harvested in the Ukraine and 34.8 centners were threshed from every hectare, 10.5 centners more than the level of the eleventh five year plan. Naturally, a lot of attention is given to an intensification of fodder production. In the southern oblasts mostly winter barley is grown and in the western and Polesskaya oblasts there is more spring barley grown.

Weather conditions last year were difficult but the majority of oblasts were able to fulfill the plans for the production of barley, corn, hulled grains. The state order for grain as a whole was fulfilled. During the current five year plan the republic on the average sold more than 1 billion poods each year to the state. For each inhabitant there are 1.04 tons produced. This level satisfied the requirements of the Food Program. Much high quality food wheat was processed including wheat for the preparation of baby and dietary food products. There were 2300 tons processed of strong and valuable wheat alone, 240 percent of the plan.

Now we must go further not forgetting, though, about the future. We cannot escape the fact that the Ukraine is one of the most intensely farmed areas in the world. It is important to preserve our main resource and simultaneously continue to intensify production. Already the large-scale introduction of an entirely new system of farming using the contour-reclamation system has begun. It has shown itself to be effective and allows us to decrease to a minimum those processes which cause erosion and to stabilize and increase humus content in the soil. However, the system calls for removing a significant portion of farm land from production and reclassifying it as land poorly suited for agriculture. The system calls for an intense utilization of level farm land and slightly sloped land.

The contour-reclamation system is the basis of the concept for the intensification of grain production for the years 1990-1995 and the period to the year 2005 which was elaborated in the republic. The concept calls for bringing the proportion of forage crops in overall grain production from 45 to 65-70 percent. The food level will stabilize at the 30-35 percent level and the overall level of grain production will increase to 55-60 million tons. The task assigned is not a simple one if one takes into account that the decision entails an increase in material and labor expenditures, production costs and a reduction in profits. This began to be especially noticeable in recent years when prices for equipment, fertilizer and services increased sharply. What should we do?

Many economists and management organs only focus on the organizational forms of perestroyka. Undoubtedly much depends on the organization of production. But now, at this particular moment, we believe that it is not advisable to aim at the elimination of even unprofitable collective and state farms. It is senseless to call for a general conversion to the private farm system without a corresponding material-technical base. That is necessary for both large, successful farms and for small peasant farms as well. In addition, the process of scientific-technical progress today has proved itself to be most effective in specialized farms.

Opponents, of course, object. It is not a secret for anyone that in public production it rarely happens that we are able to completely harvest a mature crop. And how are you going to "bring it in" if we still do not have machines to even protect the crops from insect pests and disease? In the developed grain-producing countries they have equipment for this purpose which uses the electrostatic method which permits the application of very small doses of chemicals practically without loss while our spray rigs are 15-20 years behind from a technical stand point. And there are not even enough of those. As a result, we suffer incredible losses, contaminate the product and the environment.

Up to this point the bottleneck has been the harvesting, handling and storage of grain. Even the modern "Don-1500" combines in the majority of categories are inferior to foreign models. During harvest in some years we lose

up to 6-7 centners. This is the quantity of grain which is lacking for us to be able to increase the production of animal products. The collective and state farms have little to do with overcoming the extreme backwardness of the drying and cleaning-threshing operation. At the work site they are forced to deliberately hold up the threshing of damp grain in order not to damage the product. After all, as a rule, 25-30 year old equipment is used at the threshing docks. The equipment is both physically and morally obsolete. A survey showed that only 12 percent of the collective and state farms have well-equipped threshing docks. At the same time the services of the grain processing enterprises for processing uncleaned and damp grain cost the farms a pretty penny.

The time has come for the industrial enterprises to pay more attention to the needs of the rural areas and to take into consideration that there are less and less able-bodied workers here. It is time to arrange things so that everybody does their own job and that the farmer stops making homemade tools for himself at an exorbitant cost. An increase in grain production is unthinkable without providing the necessary quantity of mineral fertilizers, improvements in the construction and supply of an equipment maintenance base. It is also unthinkable without solutions to social problems.

And the last but no less important issue. In the interests of reaching our goal, procurement prices for grain should be increased by 2.5-3 times and, better yet, to the level of world market prices with payment for a portion of the crop in hard currency. Then the farms will have the opportunity to purchase abroad modern equipment, chemicalization resources and technology. On this basis it would be possible to increase more rapidly grain production with fewer expenditures.

#### Current Crop Work Update

904B0193B Moscow SELSKAYA ZHIZN in Russian  
10 Apr 90 p 1

[Article by correspondent S. Luzgan: "Earlier Than Scheduled"]

[Text] In view of the weather conditions which have developed farmers in the Ukraine are planting crops already.

Spring has come unusually early to the Ukraine. She has made her presence known strongly even in Polese, in the northern part of the republic.

The early arrival of spring and the unusually rapid increase in favorable temperatures have shuffled the cards not only for farmers in Polese. All over the republic all types of field work have been rescheduled. I asked Deputy Chairman of the Ukrainian SSR Gosagroprom Grigoriy Alekseyevich Denisenko to tell us how the work is going in the Ukraine.

People in the country are referring to this spring, he said, as the spring of hopes and fears. Last year we had the

largest grain harvest in the entire history of our agriculture; 34.8 centners on the average with a gross harvest of 53.2 million tons. The per capita production of grain in the republic surpassed one ton. And today farms are creating a strong foundation for a new harvest. Suffice it to say that for the first time in many years all the plantings of winter grains came up. It is also rather important that they survived the winter in good, satisfactory condition. All of this raises hopes.

But why are the farmers concerned? Because it hasn't rained for over a month and in many rayons of the Odesskaya, Nikolayevskaya, Khersonskaya and Krymskaya oblasts the winter grain fields are experiencing a shortage of moisture and are showing stress.

By the way, an early but dry spring determines the farmer's tactics. He is forced to conduct the entire complex of field work simultaneously. In the southern and western oblasts they have already planted early spring crops with unusual speed and in addition they are planting the late crops, corn and sunflowers. Sugar beet growers have started working in the fields everywhere. I can't remember another spring when by 5 April half of the sugar beet fields had been planted. The planting of other technical crops and potatoes is going strong. Everywhere they are utilizing combined and wide-sweep tillage equipment. The time factor has become decisive.

On the republic's sugar beet plantations such cultural techniques as cultivation, rolling the soil both before and after planting, and placing seeds are conducted in a single technological process. One field is planted, as a rule, in one and a half to two days. A detail like this is not unimportant either. Herbicide tank mixes are used mainly in banded applications. This permits the volume utilized to be halved. During planting of intertilled crops marker arms are utilized. The orientation grooves which they lay down provide the opportunity to conduct interrow, pre-emergence cultivation as well as complete-coverage cultivation.

In short, said G.A. Denisenko, farms in the Ukraine are doing everything possible to achieve a good harvest in these unusual conditions.

### **Reliance on Intensive Technology Needed for Abundant Crops**

#### **Article Points Up Significance**

904B0192A Moscow *ZEMLYA I LYUDI* in Russian No 12, 16 Mar 90 p 1

[Editorial by P. Shcherbakov, editor of the scientific-production department: "The Lessons of Intensive Technology"]

[Text] Last year intensive technologies for raising agricultural crops were used on a total of over 55 million hectares for the cultivation of grains and oil-bearing crops, sugar beets and cotton, flax and potatoes, and

vegetables and melons. Precisely because of the purposeful work of scientists, specialists and rank-and-file village workers to technologically restructure the management of farming on the basis of its overall intensification, it has been possible to increase the productivity of many crops in recent years.

An analysis shows that on the average during the years of the current five-year plan the increase in grain from intensive farming as compared to regular technology comprised 7.6 quintals per hectare, as a result of which each year enterprises produced almost 25 million tons of high-quality grain annually. Intensive technology turned out to be especially effective on winter fields. On the average in the country each such hectare yielded over 32 quintals of grain. But this is the average. Leading enterprises such as Zarya Kommunizma Kolkhoz of Chernobayevskiy Rayon, Cherkassy Oblast, Kolkhoz imeni Zhdanov of Bershadskiy Rayon, Vinnitsa Oblast, Progress Kolkhoz of Grodnenskiy Rayon, Grodno Oblast and many others produce over 60 quintals of grain per hectare.

Cultivating grain crops according to ridge technology has resulted in a noticeable increase in yield. On the irrigated lands of the Ukraine and Moldavia many enterprises have demonstrated the high level of effectiveness of joint cultivation of corn and soybeans. Such crops yield 10-15 percent more feed units and digestible protein than fields planted in each of these crops separately.

Here is the opinion of economists. Each ruble invested in intensive technology for cultivating grain crops must yield products worth over 2.5 rubles. With an improvement in grain quality, its sale price has increased. The profitability level of the grain industry has increased by almost one-fourth as compared to the 11th Five-Year Plan.

During 4 years of the 12th Five-Year Plan there has been noticeable growth in the intensification of production of oil-bearing crops. The area in the main oil-bearing crop, sunflowers, which is cultivated according to intensive technology, increased from 1,222,000 hectares in 1985 to 2,737,000 hectares last year. On the average throughout the country an increase in yield of over 3 quintals per hectare has been achieved, which has enabled enterprises to produce about a million additional tons of oil-bearing seed.

Intensive technologies are also being introduced on almost all fields in soybeans, rape and the castor plant. Their high level of effectiveness is attested to by the experience of raising soybeans in Amur Oblast, which is discussed in the weekly *ZEMLYA I LYUDI*, Number 3 for this year.

Last year sugar beets were cultivated according to intensive technology on over 3 million hectares. Here the increase in yield comprised almost 50 quintals per hectare. By skilfully coordinating the advantages of



intensive technology with lease contracts many enterprises produce 550-600 quintals of root crops per hectare.

Promising results are being achieved by the use of new technologies for cultivating cotton, flax, potatoes and vegetables. New organizational forms for introducing scientific-technical progress in farming are having a positive effect on this. Scientific-production and production systems are proving to be highly effective.

Still we must admit that a proper return from intensive technology has not been achieved everywhere; the increase in yield has turned out to be less than the norm, and the return on the assets allocated for this purpose is inadequate.

What are the reasons for this? First and foremost it is the low effectiveness of using mineral fertilizers. The optimal ratio of nutritive substances is not adhered to. In most kolkhozes and sovkhoses top-dressing in stages with a consideration of the need of the plant at certain developmental stages is not utilized. There is a great deal of incomplete work involving seed farming and the selection of varieties and hybrids. Cases of using equipment without the corresponding adjustments are frequent.

Undoubtedly, intensive technology is a real way to significantly increase farm production output. It is important not only to recognize this fact but also to work purposefully to make sure that the effect of using the innovations become more weighty in the shortest possible time.

The editors hope that the series of materials introduced today under the heading, "The Lessons of Intensive Technology," will help specialists and rank-and-file agricultural workers to achieve these goals.

#### Academicians On Details

904B0192B Moscow ZEMLYA I LYUDI in Russian No 12, 16 Mar 90 p 1

[Article by M. Suleymenov, director of the All-Union NII [Scientific Research Institute] of the Grain Industry imeni A. I. Barayev, corresponding member of VASKhNIL [All-Union Agricultural Academy imeni V. I. Lenin], and by Kh. Akshalov, scientific worker: "Reserves of the Grain Field"]

[Text] For a long time it was felt that the primary fields for cultivating spring wheat according to intensive technology were the first and second field after fallow. We were assured that there is a drop in productivity of grains from the first crops after fallow to subsequent fields of the crop rotation. However, the results of research by scientists from VNIIZkh [All-Union Scientific Research Institute of the Grain Industry] imeni A. I. Barayev has not confirmed this. Something else became clear—the productivity of the crops following fallow depends completely on the level of intensification of cultivation technology.

The study of this process has been underway in the institute since 1984. Three technologies were compared—intensive, regular and simplified. They differed from each other in the level of introduction of technological elements in the following grain-fallow crop rotation: clean fallow - spring wheat - spring wheat - barley - spring wheat. Moreover, a study was made of the opportunity to increase the productivity of wheat by means of intensifying technology during long-term, uninterrupted cultivation of the crop in one place.

The essence of the technology consists of the following. Within the crop rotation fallow fields were cultivated with flat cutter equipment four to five times during the summer period depending on infestation to a depth of 10-12 centimeters. In the fall, deep soil cultivation was carried out. Windbreak strips were created from mustard plants to collect moisture. Phosphorus fertilizer was applied locally at a depth of 12-14 centimeters in a dose of 80 kilograms per hectare for the entire crop rotation. Sowing of fallow fields was implemented in the optimum time using the SZP-3.6 sower with fixed plowshares.

The intensification of technology to cultivate grains in the crop rotation following non-fallow predecessors consisted of the alternation of flat cutter deep and shallow soil cultivation to a depth of 20-22 and 12-14 centimeters. Intensive snow retention using the SVSh-10 snow plow was also carried out, with the accumulation of a layer of snow of no less than 50 centimeters by late winter.

In this crop rotation in 1984-1987 the herbicide triallat was used to combat wild oats in the first and second fields after fallow. In subsequent plantings triallat was not used at all because this was not necessary. Agents to protect plants from pests and diseases were also not used.

In a crop rotation with a regular cultivation technology, fallow fields were cultivated to a depth of 10-16 centimeters with a flat cutter four times during the summer. During the winter there was a one-time snow retention operation with the accumulation of no less than 30-35 centimeters of snow. Non-fallow predecessors were cultivated to a depth of 12-14 centimeters with flat cutters. Phosphorus fertilizer was applied simultaneously with sowing at a rate of 20 kilograms of active substance per hectare for the first and second crop after fallow. No fertilizer was applied for other crops in the crop rotation. In caring for crops the herbicide 2.4DA was used. Sowing was carried out within the optimal time period using the SZS-2.1 sower. The sowing norm was 3 million germinating seed per hectare.

In the crop rotation using the simplified technology fallow fields were cultivated three times to a depth of 10-14 centimeters. Fertilizers and plant protection agents were not used.

Research results showed that on fields using intensive technology there is a greater reserve of productive moisture prior to sowing as compared to fields using regular technology. The basic factors that affected this are the following: on fallow fields—adherence to the technology



for crop care during the summer and fall periods and the sowing of windrow crops; for non-fallow predecessors—deep fall-plowing cultivation of the soil combined with intensive snow retention.

On the average for the years of the study, in terms of the amount of productive moisture during the spring prior to sowing, fallow fields surpassed regular technology by 28.5 millimeters and simplified technology by 52.3 millimeters. The degree to which the former surpassed the two latter in moisture content reached 37.1 and 71.9 millimeters respectively during some years. On the average during the years of the study, at the meter level within the soil the moisture content in fallow fields was the following, depending on the technology used: intensive—156.2 millimeters, regular—127.7 millimeters, and simplified—103.9 millimeters.

With non-fallow predecessors deep soil cultivation and intensive snow retention supplied an adequate amount of moisture. On the crop rotation fields intensive technology outdid regular technology by 8.8-33.2 millimeters and simplified technology by 15.0-45.5 millimeters on the average during the years of the study. During some years, the amount of productive moisture in the meter soil layer at the time of sowing after non-fallow predecessors was not inferior to the fallow field.

The infestation of fields is directly related to technology. The combination of agrotechnical and chemical measures to combat weeds with intensive technology facilitated the effective destruction of weeds, and especially of wild oats.

With the intensification of technology for cultivating grains, it is not necessary to use herbicides every year to combat weeds. The results of the study show that an intensive struggle against weeds in the fallow field, as well as in the first two fields of the crop rotation, will enable us to maintain crops in a weed-free condition. For example, in 1988 with intensive cultivation we did not use herbicides at all. In addition, the good development of the qualitatively-best crops supplied with nutritional elements and moisture enables us to successfully suppress weeds.

Weed infestation increased by a factor of 2-3 with regular technology as compared to fields using intensive technology and results in an increase in infestation the next year. With simplified technology weed infestation of crops after fallow increases by a factor of 5-6, and with non-fallow predecessors—by a factor of 8-10.

Harvest accounting records demonstrated the high level of effectiveness of intensifying technology even when spring wheat was cultivated in one place for a longer period of time.

In extremely dry 1984-1985 the productivity of spring wheat cultivated according to intensive technology on clean fallow equalled 16.1-17.2 quintals per hectare,

which is higher by 5.3-5.5 quintals per hectare as compared to regular technology and by 9.7-10.3 quintals per hectare as compared to simplified technology.

In 1986-1987, which were favorable in terms of moisture, productivity on clean fallow reached 30 and 27.1 quintals. It surpassed other technologies by 5.4-6.1 and 8.8-18.5 quintals per hectare.

In moderately-dry 1988 productivity on clean fallow was 19.8 quintals per hectare using intensive technology. It surpassed regular technology by 4.9 quintals and simplified technology by 9.7 quintals. In extremely-dry 1989 productivity on clean fallow equalled 17.8 quintals per hectare. It surpassed regular and simplified technology by 3.4 and 7.1 quintals per hectare respectively.

On the average for 6 years of research, productivity on the fallow field has equalled 21.4 quintals per hectare. Intensified cultivation technology surpassed regular technology by 5.1 quintals per hectare, or by 31.2 percent, and simplified technology—by 10.4 quintals per hectare or 100 percent.

The effectiveness of intensification of cultivation technology is manifested in all non-fallow predecessors. The average productivity of the second crop after fallow is 19.2 quintals per hectare. Intensified technology surpassed regular and simplified technology by 4 and 10 quintals per hectare respectively.

In cultivating the third and fourth crops after fallow only deep soil cultivation and intensive snow retention were used from among the elements of intensification. This is related to the fact that in two fields of the crop rotation an intensive struggle was carried out to combat weeds, but fertilizers were applied on the fallow field throughout the entire crop rotation. It was only 3-4 crops after fallow that additionally received nitrogen-phosphorus fertilizer during sowing. The increase in yield of barley, the third crop after fallow, equalled 4.4-8.9 quintals per hectare as compared to the regular technology and 10.2-11.3 quintals per hectare as compared to simplified technology.

The increase in yield of the fourth wheat after fallow as compared to regular and simplified technology comprised 5.2 and 9.3 quintals per hectare respectively.

The effectiveness of intensified technology has been demonstrated in the continuous cultivation of spring wheat. On the average for 6 years the increase in yield as compared to regular technology comprised 4.1 quintals per hectare, and as compared to simplified technology—9 quintals per hectare.

The largest yield of spring wheat is produced when it is cultivated on fallow. With non-fallow predecessors, regardless of how far removed from the fallow field, its productivity can be maintained at the same and fairly high level by means of the comprehensive utilization of elements of intensification. For example, in 1987 the productivity of the second wheat after fallow was 20.7 quintals per hectare, of the fourth—20.8, and of the

ninth wheat after fallow—20.6 quintals. In 1988 the productivity of spring wheat comprised, according to how far removed it was from fallow: the second—16.2 quintals per hectare, fourth—17, and tenth cultivation after fallow—16.9 quintals.

A similar trend was observed in 1989. In terms of output of grain per hectare of crop rotation area intensive technology surpasses regular technology by 3.2 quintals per hectare and simplified technology by 6 quintals per hectare (Table 1).

An economic assessment of the intensification of cultivation technology in a five-field crop rotation showed that the return on additional assets equals 3.2 rubles, the production cost of a unit of production remains on one level, and clear income reached 36.4 quintals per hectare.

From one year to the next a stable harvest of grain crops has been produced by Vishnevskoye Production Association for Poultry Raising of Tselinograd Oblast, where a soil-conservation farming system and intensive technology are being comprehensively assimilated on the entire area. In 1988 in this enterprise each of 10,000 hectares yielded 18.4 quintals. Gross grain yield comprised 18,600 tons. Nearby Novoaleksandrovskiy Sovkhoz, which is characterized by similar soil and climate conditions, harvested only 17,600 tons of grain from 17,900 hectares. In 1987 productivity in these enterprises equalled 26.1 and 13.3 quintals per hectare respectively.

In 1988 in poultry-raising associations the productivity of grain crops comprised 20.7 quintals per hectare. Gross grain yield reached 20,500 tons. Farmers of Novoaleksandrovskiy Sovkhoz collected 12.3 quintals per hectare and gross grain yield comprised 21,900 tons.

Each year large yields of grain crops are achieved by the brigade of V. L. Rakovskiy of Podlesnyy Sovkhoz, Shortandinskiy Rayon. The brigade completes its late fall plowing on time, collects good reserves of moisture in the soil and works knowledgeably with fertilizers. Moreover, it uses herbicides on fields in a differentiated manner according to need. In 1988 it collected 27.5 quintals on each of 3,391 hectares.

In this enterprise the productivity of durum wheat equalled 23 quintals per hectare when cultivated according to intensive technology. Eighty eight percent of the durum wheat sold to the state has been first class. This has provided a palpable financial advantage.

The research that has been carried out as well as the practical work of the enterprise show that intensive technology for cultivating grain crops is a large reserve for increasing productivity and gross grain yield. However, intensive technology should not be seen as a simple addition of technical operations. Operations must be technologically and economically justified.

The opportunity to increase the productivity of grains with non-fallow predecessors enables us to speak about the fact that in order to increase the effectiveness of using arable land it is essential to make a transition to the intensification of all crops within a crop rotation.

Table 1

Technology	Years			
	1987	1988	1989	Average
Simplified	10.3	7.9	8.0	8.7
Regular	12.6	12.4	10.8	11.9
Intensive	17.4	15.6	14.0	15.7

### Impact on 1990 Crop

904B0192C Moscow SELSKAYA ZHIZN in Russian  
6 Apr 90 p 1

[Article by Nikolay Osychkin: "The Spring of Hopes and Worries"]

[Excerpts] In many parts of the country spring notified us of its coming unusually early this year. The fields became covered in vegetation, trees and shrubs are beginning to bud and in the south orchards have begun to bloom. It is as if it is May and not April, when light frost or even a heavy frost is possible. But we cannot avoid the caprices of nature. From ancient times farmers have been combatting them through their efforts and skill, striving to lay a firm foundation for the harvest in the spring under any circumstances.

[passage omitted]

A subject of special concern is the overall increase in grain production. Last year 211 million tons of grain were harvested in the country, but sales to the state comprised only 60 million tons. This is significantly less than planned and does not meet the country's demand. The grain shortage is considerable, which forces the government to resort to considerable imports. Imports consist of 35-40 million tons per year, for which enormous hard currency reserves are spent. Right now an extensive state grain program for 1991-1995 is being developed, the implementation of which will bring new quality to the grain industry and will enable it to eliminate dependence on the outside. The indicated measures will become the specific guide to action for all levels of production, beginning with the lessee, kolkhoz or sovkhoz and ending with union organs.

The main thing that will help in achieving success is the continued assimilation of intensive technologies, which with all of our shortcomings offer the opportunity to produce 10-15 quintals more grain per hectare than with regular technologies, and which give the grain fields stability. This year winter crops are being cultivated in the new way on almost 20 million hectares. In the spring it will be necessary to allocate spring crops on another 30 million. In the future it is planned to expand the intensive field to 80 million hectares, and not only for grains

but for potatoes, sugar beets and vegetables too. The task is a responsible one, and a knowledgeable, scientific approach to its solution is needed everywhere. How can we speak about effectiveness, for example, when in the enterprises of the RSFSR only 133 kilograms of mineral fertilizer were applied per hectare of "intensive" grain crops while the plan called for an application of 205 kilograms. Grains receive poor quantities of fertilizer in the fields of Siberia, Kazakhstan and the Transvolga—our main suppliers of high-quality grain.

[passage omitted] Practically all of the seed stockpiled for the beginning of sowing by the enterprises of Voronezh, Kursk, Volgograd and Bryansk oblasts and Stavropol and Altay krais was of a high condition. Unfortunately, the same cannot be said for the kolkhozes and sovkhozes of Kostroma, Yaroslavl, Kirov and Perm oblasts and the North Osetian ASSR, where one-fourth of the seed fund still has to be brought up to sowing standards. There is extremely little first class seed in Pskov, Kalinin and Smolensk enterprises. One can only be amazed at why directors and specialists of some kolkhozes and sovkhozes have not organized precise work of specialized seed links and have not concerned themselves with the timely implementation of exchange operations. Can it be that due to this kind of mismanagement poor seed will once again be placed into the ground, which naturally will have an effect on the quantity and quality of the harvest!

And how many complaints we receive from the population concerning the shortage of groats crops, especially buckwheat! Soon sowers will be brought out into the fields and many enterprises either do not have buckwheat seed or it is not suitable for sowing. This is the situation in Ryazan, Kaluga and Amur oblasts and the Mari ASSR, where one-third of buckwheat seed reserves have been classified as unconditioned. In Orenburg Oblast and the Udmurt ASSR legume seed is in poor condition, in Chechen-Ingush ASSR—rice, and in the oblasts and autonomous republics of the Central Non-Chernozem—long-fiber flax. A great deal must be done in enterprises in order to prepare for the sowing of seed potatoes.

[passage omitted]

This year's spring is unusual in all regards. It is a spring of great hopes and concern. Those who demonstrate a high level of discipline and organization and who achieve the strictest adherence to the entire complex of agrotechnology and techniques on every field will be the victors in the active campaign for the harvest.

UDC 631.521

### Combating Crop Pests, Diseases in Southern RSFSR

904B0209A Krasnodar SELSKIYE ZORI in Russian  
No 4, Apr 90 pp 40-43

[Article by Yu. Shurovenkov, director of the All-Russian Scientific Research Institute for Protecting Plants [VNI-IZR], N. Mikhaylova, senior scientific associate and

candidate of biological sciences, and N. Burova, senior scientific associate: "Pests and Diseases and Measures To Combat Them: The Phytosanitary Situation in the Central Chernozem and the Northern Caucasus"]

The long, warm, and basically dry fall and mild winter have proved to be favorable for the winter survival of a majority of pests and disease stimulants of agricultural crops in oblasts of the Chernozem zone and Northern Caucasus. Here is the prognosis for this year that was compiled by associates of the All-Russian Scientific Research Institute for Protecting Plants.

#### 1.

First of all, we would like to note that in the last 2 years we have noticed somewhat of a decrease in the number of the main pest of wheat plantings in both zones—the sunn pest. We believe that this winter was unfavorable for it, too. Therefore, there is not expected to be an increase in the number of bugs that survive the winter. But we must also taken into account that given the dry weather during the egg-laying period and also during hatching and developing of the young larvae (May-June), there may be an increase in the number of bugs of the new generation. Then, undoubtedly, chemical treatments are necessary. They are made when 10 or more larvae are detected in 1 square meter during the caryopsis formation phase. They usually take preparations such as chlorophos, 80 percent; metaphos, 40 percent k.e. [starch equivalent]; volaton, 50 percent k.e.; and so forth. It is not expedient to make treatments when 1-2 larvae are detected per square meter, as was recommended before. Our studies have indicated that the grain quality does not deteriorate with a 3- to 4-percent damage.

A quick harvest is of great importance in obtaining strong and valuable wheat grain. If this grain lies cut down for 6-8 days, it is damaged 2-3 times more by the sunn pest than seed taken from the same field prior to harvest. As much as possible we must practice direct combining and prepare the seed well, removing small and underdeveloped seed that is most often damaged by the sunn pest. A mandatory condition is to store seed from fields with a low number of pests separately from seed from areas heavily infested with the sunn pest.

In the Northern Caucasus, as well as in individual regions of the Chernozem zone, pockets of winter crop damage by the oat leaf beetle are possible. Although, again, the number of new-generation beetles has decreased considerably compared with 1988. We will note that damage by the oat leaf beetle is heavily exaggerated, and our observations have shown that chemical treatments against beetles that have survived the winter are not economically justified. In conditions of the dry, warm spring, the number of larvae may be high, but extermination measures are necessary only if during the leaf tube formation stage there are 0.5-1.0 egg or larva on each plant, which with a normal thickness of sowing is equal to approximately 300-600 specimens per

square meter. Far from all fields contain such a number; therefore, careful inspections are necessary. Phosphamide BI-58, 40 percent k.e., metaphos, 40 percent k.e., or metathion, 50 percent k.e., are effective against the larvae.

The **grain beetle** remains a dangerous pest to winter crops in the Northern Caucasus. Weather conditions on the whole were favorable for laying eggs and development of the larvae. Grain losses during harvest and large planting areas of winter wheat where grain crops were planted before contributed to an increase in areas infested with larvae in the fall, particularly in Krasnodar Kray and Rostov Oblast. Therefore, careful inspection of planting areas is necessary in the early spring. Upon detecting 3-5 larvae per square meter, they are treated with basudin, 60 percent k.e. or 40 percent s.p. [ethyl alcohol]; metaphos, 40 percent k.e.; or volaton, 50 percent k.e. The number of grain beetles can be reduced to manageable levels or even eliminated completely exclusively by agrotechnical methods. This primarily requires avoiding planting areas of grain crops in areas where stubble crops, including cereal grasses, were planted before. It is necessary to fight grassy weeds everywhere (quack grass, bristlegrass, and so forth) and cultivate fallow land in a timely manner. Techniques such as breaking up the stubble and tilling can destroy the bulk of the eggs and larvae. A necessary condition is to harvest grain crops in short time periods and destroy windfall seedlings. The latter deprives the larvae of food and reduces their number by 40-50 percent.

Substantial damage from **dung beetles** is possible this year in the Central Chernozem oblasts and in individual areas of the Northern Caucasus, where primarily larvae in their second year of life went to spend the winter (59.5-73 percent of the total number). Their numbers and damage can be kept to a minimum also by a set of agrotechnical measures. First of all, on fields heavily infested with larvae it is recommended to sow crops such as sunflowers, millet, buckwheat, and potatoes. Breaking up the stubble after the harvest, early fall plowing, and cultivation of fallow land help to kill up to 50 percent of the eggs and larvae. Chemical treatments are necessary in the extreme case when there are more than four beetles per square meter. The same preparations are used as against the sunn pest.

A high degree of damage is expected from **sawflies** in the Northern Caucasus. Damage to the stalks of winter wheat can reach 21-68 percent. The number of these pests can be effectively reduced exclusively by alternating crops, plowing and turning over the sod, and especially cultivating strains resistant to this pest.

Pockets of winter wheat damage from Hessian flies are possible. The number of these pests, as well as frit flies, can be reduced by agrotechnical measures: crop rotation, breaking up the stubble, early destruction of fallen seed, and extermination of the pest's natural sanctuary—quack grass.

In Krasnodar Kray, sowing areas of winter wheat are threatened by the **green leaf roller moth**. The wintering conditions here were particularly favorable. The dry, warm, and windy weather during the dispersal of the grubs (April) makes it possible for the pest to spread widely over the fields, and there will be many of them particularly near forest strips and along the periphery. Therefore, to preclude massive treatments, the nature of the infestation is taken into account during inspection. If there are 100 young or 50 middle-age grubs per square meter during the leaf tube formation stage, use preparations such as metathion, 50 percent k.e., metaphos, 40 percent k.e., or phosphamide, 40 percent k.e.

The **barley flea beetle** is a fairly common pest in both zones. It does the greatest damage during very dry, hot springs to spring wheat and barley. Therefore, treatment with preparations is not economically expedient in most cases, and all the measures conducted to obtain good sprouts and ensure their rapid growth and development reduce the damage from this pest to a minimum.

The **European corn borer** poses a danger to corn planting areas planted in wheat in the Northern Caucasus. During the blooming—milky stage (when the moths begin to fly), it is necessary to disperse *Trichogramma* (at the rate of 100,000-300,000 specimens per hectare). The treatment is repeated 6-7 days later. If there is a 10-percent infestation of the plants with eggs, metaphos, 40 percent k.e., is sprayed during the period of the mass hatching of the grubs.

Taking into account the ample fall infection of winter wheat, development of **brown rust** is expected given favorable weather conditions in the spring, and with temperatures of 15-20 degrees and humidity above 50 percent **powdery mildew** will develop with the start of maturing of grain crops to the heading stage.

In the Northern Caucasus and a number of areas of the Central Chernozem, **septoria spot** was detected in the fall. Its infestation especially increases when there is an abundance of precipitation during the first half of the growth stage of the wheat, during the lodging of the plantings, in short-stalk strains, and also in a very thin stand density in irrigated areas.

Combining agrotechnical and chemical methods is the most effective in combating these diseases. The main thing here will be to destroy the sources of the infection (plowing under stubble, removing straw from the fields in the fall), for planting use seeds of the highest reproductions with a large weight and strains that are disease resistant (for the Central Chernozem, these are Chayka, Donskaya bezostaya, and Zarya; for the Northern Caucasus, these are Obriy, Partizanka, and Olimpiya), and put winter crops where the previous crops were best. If a 20-30 percent development of powdery mildew is predicted during the heading stage, it is necessary to treat with fundasol; if there is a 30-40 percent envelopment of this disease together with brown rust during the milky

stage, use preparations such as bayleton or tilt. Begin treatments only on the signals of the regional plant protection stations.

**Loose smut** of wheat and barley are the most prevalent smut diseases in our zones. The reason for this is the high potential for infection, particularly in the Northern Caucasus, where instances of contamination of seed plantings have been noted. We would like to emphasize here that all strains being cultivated are susceptible to this disease. To reduce the damage, it is necessary above all to treat the seeds with systemic preparations (bayton, vitavax, fundasol). Above all, this work is carried out on seed-growing farms. In addition, it is mandatory that sections of land free from the infection be set aside for seed purposes.

**Root rot** on grain crops appears everywhere. The level of development of this disease will be determined mainly by the particular features of farming practices, and also by the moisture provided the plants. A number of agrotechnical measures should help limit the spreading of the disease: observing crop rotation, spring harrowing of winter crops with fertilizer top dressing, planting quality seeds, and mandatory treatment of seeds. Chemical protection of winter crops is also possible. It is especially necessary in the Northern Caucasus during the bushing out or shoot stage. Fundasol is used for this purpose.

Barley **helminthosporiosis** [barley stripe] on leaves in the form of dark brown stripes and veined spots will develop everywhere. The potential for infection is especially high in oblasts of the Central Chernozem. Favorable weather conditions—warm, humid weather during the first half of growth—will help intensify development of this disease. Primary attention is given to the seed material to limit the development of the blight. It is necessary to prepare the seeds carefully and store them under optimum conditions. In no case is permitted to increase the moisture content of the seeds. The seeds should be treated in advance using highly effective preparations (phenoram, vitatium, vitavax-200, granosan). Treatment with tilt is required in the leaf formation stage on seedlings.

**Fusarium wilt** of the wheat ear should be expected mainly in the Northern Caucasus. It will affect winter rye in the Central Chernozem. Humid, warm weather conditions during grain forming and during lodging of the sowings will contribute to a particularly heavy development of the infection. Preventive measures play a very important part in eliminating this infection. It is especially necessary to observe a set of agrotechnical procedures, as well as to treat the seeds with specific preparations (baytan, fundasol).

**Pea and bean weevils** will be widespread in plantings of peas. The damage caused by them increases during hot, dry weather during the period the seedlings appear. Treatment of plantings with chemicals is economically justified if there are 10-15 weevils per square meter

during the stage of 2-3 true leaves. The following preparations are used: metaphos, 40 percent k.e.; chlorophos, 80 percent s.p.; or methyl parathion, 50 percent k.e.

With moderately humid or dry and warm weather in the second half of May and early June, the **pea aphid** multiplies. In the absence of aphid-eaters in the planting areas (lady beetles, hoverflies, etc.), treatments are begun after catching 30-50 aphids in 10 sweeps of an insect net. The following are usually used for this purpose: metaphos, 40 percent k.e.; methyl parathion, 50 percent k.e., or wofatox, 18 percent s.p.

A high degree of **pea weevil** infestation is expected in the Central Chernozem this year (especially in the Belgorod and Voronezh oblasts). They settle in usually during the budding stage. If 15-20 weevils are detected in 10 sweeps of an insect net, chemical treatment is invariably necessary. The preparations used are the same as for the pea aphid.

## 2.

In sugar beet plantings, the stage of forming the first pair of true leaves is especially critical. That is when they are damaged by the **flea beetle**, the **beet root weevil**, and the **gray beet root weevil** [*tanymecus palliatus*], and in the Northern Caucasus in pockets in Voronezh and Belgorod oblasts by the **black beet root weevil** [*psalidium maxillosum*]. The damage by them increases during dry, hot weather. The number of **southern gray beet root weevil** [*psalidium maxillosum*] has been increasing in Krasnodar Kray in recent years, and the **striped beet root weevil** has been encountered in individual central, southern, and eastern areas of Voronezh Oblast. Treatments against the flea beetle during the stage of forming the first pair of true leaves during hot weather are required even if the pests are in small numbers. The threshold of damage is one beetle per plant with conventional planting and one to two specimens per square meter with precise seeding. This threshold must be considered during optimum weather conditions—moderately warm, humid weather. The economic threshold of damage by the beet root weevil is 0.2-0.3 weevils per square meter, and for the gray, black, and other types of weevils it is 0.3-0.5 per square meter. The following insecticides are used in combating beetles and weevils: metaphos, 40 percent k.e.; basudin, 40 percent s.p.; volaton, 50 percent k.e.; or dylor, 80 percent s.p. If the planting areas have been planted with seeds treated with furadan or another preparation closely approximating its action, the seedlings do not require treatments, since they are toxic to the beetles and weevils.

With moderately humid and warm weather in all the oblasts of the Central Chernozem and Northern Caucasus, damage can be expected from the **beet leaf aphid** on seed plants and in pockets on commercial sugar beets. Treatment of planting areas is economically justified if a 20-30 percent aphid infestation is observed during the stage of the formation of the second and third leaves. One of the following preparations is used: antio, 25

percent k.e.; carbophos, 50 percent k.e.; metathion, 50 percent k.e.; or metaphos, 40 percent k.e. However, if there is a large population of aphid-eaters, when in the second half of June one out of every two or three plants is inhabited by lady beetles and hoverflies, the need for treatments drops off.

With dry, warm weather during the summer period in Krasnodar Kray and Voronezh, Lipetsk, and Kursk oblasts, the appearance of beet root aphids is possible, pockets of which have been detected in these areas.

Almost every year sugar beet fields in the Northern Caucasus are heavily damaged by the **beet leaf miner**. With a dry, hot spring, the first generation will damage seed plants; the third and fourth generations are harmful to the commercial sugar beet. The leaf miner is especially harmful during the root formation stage. The main measures for combating it (as well as the root aphid) are agrotechnical measures. Use of preparations is effective when an average of at least two grubs per plant are detected at the beginning of the row crown. The same preparations are used, other than metaphos, as to combat the beet leaf aphid.

Every year the **beet bug** is a dangerous pest to sugar beet seed plants in Voronezh Oblast. It infests the majority of the fields with transplantings. Treatments are made in a complex of measures to combat the beet leaf aphid.

The **beet web worm** is one of the most dangerous polyphagous pests. It poses a danger to plantings of sugar beets, sunflowers, and corn. Centers of its reproduction are perennial leguminous grasses, idle land, berms along strips of woods, and so forth. The beet web worm requires close observation throughout the entire vegetative period. Chemical treatments are applied if the number per square meter on sugar beets during the stage of formation of the second and third pairs of leaves and the crowns of the plants in the rows is 10-15 grubs during humid weather and 5 grubs during dry weather and if the number on sunflowers during formation of the third and fourth true leaves is 10 grubs per square meter. The following preparations provide good effectiveness: chlorophos, 80 percent s.p.; volaton, 50 percent k.e.; zolon, 35 percent k.e.; and others. Treatments by them are also effective against leaf miners and borers.

Of the sugar beet diseases, **black root** will be widespread, particularly with a protracted, cold spring and in heavy clay soils. Timely cultivation, formation of plant spacing with simultaneous cultivation of the spaces between the rows, and top dressing will reduce the damage from this disease to economically imperceptible levels.

**Sugar beet cercosporosis** (leaf spot) may also become widespread with frequent and abrupt changes from hot weather to rainy weather during the summer, especially in the Northern Caucasus. Development of the disease will particularly intensify in the second half of the summer. Therefore, during the stage of crowning of the rows it is necessary to spray the planting area with cuprozan, 80 percent s.p., or cuprous oxychloride, 90

percent s.p. Bordeaux mixture can also be used. If the infection is heavy, the fields are treated again after 15-20 days.

**Powdery mildew** will especially develop on sugar beets during hot, dry weather. It will most likely be widespread in the Central Chernozem oblasts, where it will develop in July and begin to affect seed plants and commercial beets. Development of this disease is weaker in the Northern Caucasus, but individual pockets are also possible here. If there is a threat that planting areas will be heavily affected, they are treated with colloidal sulfur and its wetting powder. With the simultaneous development of cercosporosis, it is recommended to add to the sulfur suspension cuprozan, 80 percent s.p.; cuprous oxychloride; or Bordeaux mixture.

Cool weather with frequent rains can cause sowings and seed plants of sugar beets to become infected with **peronosporosis**, which develops during the stage of formation of the three pairs of true leaves and development of the rosette of seed plants. If there is a threat of a heavy spreading of this disease, sowing areas are sprayed with zineb, 80 percent s.p., or polycarbazine, 80 percent s.p.

With excessive moisture in the soil, combined with its compactness and weediness of the planting areas, in the second half of the summer **sugar beet root rot** (fusarial rot, brown rot, and beet scab) may become widespread. Agrotechnical measures are of paramount importance in combating it, as well as other diseases and insect pests (beet leaf miner, beet root aphid, weevils). These measures include mandatory observance of crop rotation; moving sowing areas away from last year's beet fields, on which plant residues should be thoroughly destroyed and plowed in the fall; timely and thorough tilling between the rows; forming of a thick stand; combating weeds; and optimum application of fertilizer.

**White and gray rot** develop on sunflowers in conditions of lower temperatures and the humid period in the second half of vegetation, especially during the seed ripening stage. Agrotechnical measures, combating weeds, timely desiccation of the sowing areas before harvest, and treatment of the seeds will help to reduce development of the disease. In addition, spraying of the sowing areas is required during the period of mass flowering. Development of downy mildew, septoria leaf spot, phomosis, and embellisia is possible with favorable weather conditions.

Vegetable crops in both zones will be damaged by leaf-gnawing and sucking pests: **phyllostreta**, **cabbage flies** (control of flies is done during the verticil stage upon detecting 6-10 eggs on 10 percent of the plants), **large and small cabbage white butterflies**, **cabbage aphid** (control is done when at least 10 percent of the plants are infested during the head formation stage), **cabbage moth** and **diamond back moth**, **meadow moth**, and other leaf-gnawing lepidoptera. Treatments are applied when 3-5 grubs are detected on 10 percent of the infested plants during the leaf verticil stage and the start of head

formation. In combating lepidoptera, it is recommended to apply biological substances and resort to chemical substances only upon reaching the economic threshold of damage. Apply one of the following preparations: actellic, 50 percent k.e.; volaton, 50 percent k.e.; chlorophos, 80 percent; carbophos, 50 percent k.e.

The most harmful cabbage disease is **wire stem**. The disease will be noted on seedlings in greenhouses and cold nursery seed plots. **Black rot** and **slimy rot** develop on mature plants. The potential for this infection is high on most farms of the Central Chernozem. Timely conduct of all agrotechnical measures (plowing under plant residues, an irrigation routine, observing crop rotation, controlling weeds) can significantly limit the development of these diseases. A mandatory procedure in combating many cabbage diseases is to treat the seeds with TMTD [tetramethylthiuram-disulfide], 80 percent s.p.; phenothuram, 65 percent s.p.; or tigan, 70 percent s.p.; dip the roots in a 0.1-percent suspension of 5-percent phyto bacteriomicin.

The **Colorado potato beetle** will be a pest in potato plantings. Treatments are applied when there are 10-20 larvae on 5-10 percent of the infested bushes. One of the following insecticides are used: volaton, 50 percent k.e.; dylor, 80 percent s.p.; decys, 2.5 percent k.e.; zolon, 35 percent k.e., and others.

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## MACHINERY, EQUIPMENT

### Problems Remain With Small-Scale Equipment for Lessees, Farmers

#### MB-1 Design, Operational Problems

904B0176A Moscow SELSKAYA ZHIZN in Russian  
10 Jan 90 p 2

[Article by B. Prasolov, lecturer in the Tractor and Automobile department of Perm Agricultural Institute: "Motorized Unit With Surprises"; (similar material was published in JPRS Report: SOVIET UNION ECONOMIC AFFAIRS, UEA 90-005, 9 Feb 90)]

[Text] Each year thousands of villagers and hobby gardeners become the owners of motorized units and mini-tractors. Having stood in line for the purchase and having spent a considerable sum, the proprietor of a private plot or garden acquires a mechanical helper. He hopes that now it will be easier to plow, sow and mow than manually. After all, mini-equipment will take all of the heavy work upon itself...Are all of these hopes always justified?

In the spring my friends and I purchased an MB-1 Luch motorized unit from the Perm Engine Building Plant. The Luch with its accessories costs over 1,100 rubles. Its owner naturally feels that it will work dependably for a long period of time. But as it turned out, the MB-1 is the very capricious and undependable child of its designers.

The latter did not take into consideration many of the special features of work on the land and tolerated serious errors.

The starter's string broke. This happens. But in order to replace it, it is essential to take apart the starter, in which there is a stubborn spiral spring. In the course of repairs the spring immediately straightens out. If your attention wanders even for a moment, you are in danger of losing your eye. It is practically impossible for an inexperienced person to put the mechanism back together again. It becomes necessary to demonstrate outstanding technical knowledge. The instructions that come with the motorized unit do not contain any helpful information.

The next unpleasantness is the work with the harrower. Having attached it to the unit, you will cultivate a large section of land on the first day. Here the machine will not let you down. The defect will come to light later, in the morning. On the second day oil will definitely start leaking from the oil seals of the reduction gear's outlet shaft.

The lower portion of the reduction gear works in the ground in an abrasive environment. The regular oil seals that are installed on the motorized unit are not intended for this purpose and deteriorate rapidly. Agricultural engineers are very familiar with this. But city designers have allowed the mistake.

We designed an additional seal at the exit site of the shaft from the reduction gear and proposed the improvement to the Perm builders of the motorized unit. Perhaps the opinion of scientists will be listened to in the plant?

Now about the hay mower. Our opinion is that it is not capable of operating. In city grass with sparse cover and an ideal even surface it can be used. But on village meadows with a good grass stand, on land that is hard to reach, excuse me, but nothing happens. Because of the unevenness of the land the knife cuts into the turf and jams. This results in the slipping of the belt drive, its rapid wearing out and sometimes in the tearing of the belts. During work with the hay mower the cutting apparatus is not visible—it is hidden by the gasoline tank that is located right in our field of vision. This is not mowing but pure torture.

The system for starting the Luch is ultramodern, electronic. If one part breaks down no one locally can fix it. It is necessary to travel to Perm to the guarantee shop. We discovered a considerable axial slack in the crankshaft. We had to place a washer under its bearing in order to eliminate the plant's flaw. Otherwise an accident would have been unavoidable.

We have mentioned only the main design problems created by the motorized unit's developers. There are many other flaws. I think that the Perm Engine Building Plant will pay attention to the complaints of specialists and purchasers.



**From the Editors:** We receive many letters from the owners of mini-equipment with complaints about its low quality and expense. There are very few repair shops and most of them are located in cities.

"I purchased a small KMM-1.0 harvester. A short time passed and then suddenly the fork's bearings fell apart. And I have to repair it myself," writes L. Kaliman from the Bashkir ASSR. "There are no repair shops and I have no idea where to obtain spare parts. The manufacturer refuses to help and so does Posyl'torg [Republic Mail Order Trade Office]. What should I do?"

V. A. Zabegalov from the city of Asino, Tomsk Oblast, poses the question even more broadly. He writes: "Why don't people lease the land? Because they have nothing to cultivate it with. I think that we should reorient some of our enterprises for the production of small-scale agricultural machinery and accessories for them and to saturate the market with these products."

We are addressing these problems to Minavtoselkhoz-mash [Ministry of Automotive and Agricultural Machine Building] and Tsentrsoyuz [Central Union of Consumers' Societies]. Today an extensive program is being planned to increase the production of motorized units and mini-tractors; their production is being assimilated by several ministries. In developing mini-equipment, we must think first and foremost about its dependability, a high level of productivity and comfort. We feel that Perm engine builders were clearly in a hurry and put a non-perfected model on the market.

#### **Follow-Up—Still No Resolution**

904B0176B Moscow SELSKAYA ZHIZN in Russian  
24 Jan 90 p 1

[Article by A. Mosyagin, village of Pravdinsk, Gorkiy Oblast: "'Motorized Unit With Surprises' (10 January)"]

[Text] For more than 10 years now people have been writing that certain plants have begun to manufacture mini-tractors, yet very few of these tractors are for sale; they have not been perfected and often break down. But among skilful craftsmen there are tractors that you will fall in love with—they have enough power, they maneuver well and there is a double plow. Perhaps it would be worthwhile to have an exhibit of tractors created by our craftsmen, to select the best and to mass produce them? In this same newspaper, reviewer A. Zyuzin writes about the contract to produce 300,000 cars. So it will happen that the individual will drive to his garden by car but he will dig, plow and mow manually.

#### **Production of 'Prikarpatets'**

904B0176C Kiev PRAVDA UKRAINY in Russian  
23 Jan 90 p 1

[Interview with D.V. Kavitskiy, senior specialist in the department of scientific-technical progress, machine building and foreign economic ties of the Business

Administration, UkSSR Council of Ministers, by RATAU correspondent: "What the 'Prikarpatets' Will Be Able To Do"]

[Text] The UkSSR Council of Ministers has approved a decision on the organization of the production of small-scale "Prikarpatets" tractors and agricultural equipment for them.

"This unique machine was designed by specialists of the association Ukragropromremmash [Ukrainian agroindustrial machine industry association] of the republic's Gosagroprom [State Agroindustrial Committee]," said D.V. Kavitskiy, senior specialist in the department of scientific-technical progress, machine building and foreign economic ties of the Business Administration, UkSSR Council of Ministers, to our RATAU [Ukrainian New Agency] correspondent. "The head enterprise for the manufacture of tractors is to be Ivano-Frankovsk's Karpatagromash [Carpathian agricultural machinery] Plant of this association. The accessories for it will be manufactured by the following associations: Odessa Plant of Agricultural Machine Building imeni Oktyabrskaya Revolyutsiya, Kievtraktorodetal [Kiev tractor parts association] and Berdyansk Harvester Production Association. A machine for use on private plots is planned. Plant tests of test models have demonstrated the machine's high level of effectiveness."

[RATAU correspondent] What operations will the "Prikarpatets" help to carry out?

[Kavitskiy] First of all, it will be able to carry out soil cultivation operations. For this every tractor is equipped with a plow attachments, a harrow and a cutting cultivator. In addition to them, the equipment set includes a ridger and a front-mounted mower. Of course, the machine will also be used for transportation purposes. I am sure that village craftsmen will find other uses for the tractor.

I will mention its basic technical features. The capacity of the engine is 8 horsepower. Its maximum speed is 20 kilometers per hour, and its minimum—a little over 2 kilometers per hour. The expenditure of fuel is 2.5 liters per hour of operation. The planned price of the tractor (without the equipment set) is about 2,800 rubles.

[RATAU correspondent] I think that there will be many people wishing to acquire this kind of machine. Where and how will they be able to do this?

[Kavitskiy] The first 500 "Prikarpatets" machines will be manufactured next year. In 1995, production volume will increase tenfold. Moreover, as has already been reported in the press, small-scale machinery of this class will also be manufactured by the Kharkov Tractor Plant. In this way, gradually demand for such machinery will be satisfied. The sale of the tractor to the population will be carried out by local enterprises and organizations of consumer cooperatives. They should be addressed by those who wish to have this kind of helper on their private plot.



### More on 'Prikarpatets'

904B0176D Moscow SELSKAYA ZHIZN in Russian  
10 Feb 90 p 2

[Article by N. Pugovitsa: "Tractor for the Private Plot"]

[Text] Kiev, 9 Feb (SELSKAYA ZHIZN correspondent). "The capacity of the engine is 8 horsepower. Its maximum speed is 20 kilometers per hour, and its minimum—a little over 2 kilometers per hour. The expenditure of fuel is 2.5 liters per hour of operation"—these are the basic technical features of the small-scale "Prikarpatets" tractor designed by specialists of the Ukragro-promremmash Association of the republic's Gosagroprom.

It is earmarked for private plots. Each machine is equipped with a trailer plow, a harrow and a cutting cultivator. The equipment set also includes a ridger and a front-mounted mower, and the tractor can also be used to move various loads.

The "Prikarpatets" has demonstrated its high level of effectiveness in plant testing. The time is not far off when it will appear on peasants' private plots. The UkSSR Council of Ministers has approved the decision to organize the production of small-scale tractors of this brand and the agricultural accessories for it.

Next year the first 500 tractors will leave the assembly line and in 5 years it is planned to increase their manufacturing tenfold.

### Garden Tractor Complaints

904B0176E Moscow SELSKAYA ZHIZN in Russian  
10 Mar 90 p 1

[Article by A. Zubkov and others, total of eight signatures, village of Shelekhovo, Tayshetskiy Rayon, Irkutsk Oblast: "'Tractor for the Private Plot' (10 February)"]

[Text] Can a peasant buy, repair and register a tractor that has been written off? The chairman of Gostekhnadzor [State technical control association] answered that this is forbidden, that we can buy only a new

machine or one that has not been written off. But there are no new tractors for sale, and it is impossible to buy those that have not been written off because a kolkhoz cannot buy a new tractor without writing off the old one. But if the written-off tractor is bought and repaired it cannot be registered because it is...written off. It is forbidden to operate a tractor that is not registered. This is a vicious cycle. For whom are all these prohibitions advantageous?

### Accessories for T-25

904B0176F Moscow SELSKAYA ZHIZN in Russian  
11 Feb 90 p 1

[Article: "Manufacturing Assimilated"]

[Text] Arzamas, Gorkiy Oblast, 10 Feb (TASS). The workers of Arzamasskiy Plant of Communal Machine Building are directing their products at lessees and cooperative workers.

Here they have assimilated the manufacture of trailer equipment for the standard T-25A wheel tractor. Equipped with a set of trailer accessories, the smallest tractor in the country can now carry out pre-sowing and interrow soil cultivation, crop care and hay harvesting. Its basket attachment, equipped with an unloading mechanism, enables farmers to transport a load weighing up to 400 kilograms.

### Kharkov Mini-Tractors

904B0176G Moscow RABOCHAYA TRIBUNA in Russian  
16 Jan 90 p 1

[Article by A. Vyatkin: "Powerful 'Little Guys'"]

[Text] Production of equipment for individual utilization has been undertaken at the Kharkov Tractor Plant. Some 500 mini-tractors, capable of putting an end to manual labor in tilling the soil and hauling loads, have already been produced and sold. The factory collective is increasing output of current production. Those who like agricultural work will get 2,000 of these convenient, maneuverable "little guys."

## POLICY, ORGANIZATION

### Measures To Improve Consumer Goods Market Planned

904D0098A Moscow *PLANOVOYE KHOZYAYSTVO in Russian* No 3, Mar 90 pp 37-45

[Article by Yu. Samonov, chief specialist of USSR Gosplan, candidate of economic sciences: "The Mechanism and Prospects for Development of the Consumer Goods Complex (Published for Purposes of Discussion)"]

[Text] The frontier between FYP's is a time to analyze more thoroughly what has happened and to work out new approaches and solutions. Today, they are related to the problem of the economy's reorientation toward the social sphere. The growing needs of the population must become the principal reference point in development of all intersector complexes and a criterion for evaluating the real need for products for production and technical purposes.

The government has outlined measures over the next 3 years aimed at accomplishing major structural shifts in the economy. Obvious though it is that these are in many respects directive methods of management, they are still unconditionally necessary and timely. Given the present structure of industrial production, the attempt to invigorate commodity-money relations in the economy and to create a full-fledged market for goods and services would prove to be unpromising without these measures. Those are the positions from which the plan for 1990 was formed and the fundamental approaches to the next FYP defined.

At the same time, there remain many unsolved problems, and new questions are arising: What is the mechanism for accomplishing the economic maneuver outlined by the plan and the further development of the complex of the consumer goods industry, which in our view is just coming into being? What is the optimum mix between the plan and the market, between centralized and decentralized methods of management, and what as a consequence will the 5-year plan be like? We will take up those questions.

### The State of the Consumer Market

Over the period 1986-1989, the production of consumer goods (excluding alcoholic beverages) increased in the average year by 5.7 percent as against 4.8 percent called for in the 5-year plan. The target for the total amount produced in the first 3 years has been exceeded by 32 billion rubles. Yet over that period personal money income has grown more rapidly: in 1988 alone it exceeded the planning targets by 20 billion rubles. In 1989, the situation continued to become more acute: as before, personal money income substantially exceeded the growth of consumer expenditures, and unsatisfied demand grew speedily (it is estimated at about 165 billion rubles).

On the whole, the process of augmenting the supply of commodities is still lagging behind the growth of the flow of money. Fulfillment of the 1989 plan for production of consumer goods involved a great strain (according to the estimate that is awaited, it was underfulfilled by 7-8 billion rubles), but personal income grew by 64 billion rubles.

The problem of unsatisfied and deferred demand has become chronic in our country: in the current 5-year planning period on the average people are unable to turn into goods, services, and other expenditures 20 kopecks out of every additional ruble earned. In 1988, in our view, the absolute size of savings crossed the "red line" beyond which practically their entire growth (taking inflation into account) is transformed into unsatisfied deferred demand, and articles in everyday demand become scarce.

What is the way out? The answer to that question would seem to be obvious: there has to be an essential increase in the scale of production of goods for the public and in the volume of paid services, income has to be linked more closely to the rate of the end result of production, more precisely to the level of satisfaction of people's real needs, and finally, the public has to be furnished new channels for using its money. But the obviousness of this answer does not mean that it is a simple matter to carry it out in economic practice.

Decisions of the government, decisions out of the ordinary, have been made and are being prepared along every line to stabilize the situation on the consumer market. Nevertheless, it has to be emphasized that the problem of the balance between personal money income and expenditures cannot be solved by moving along only one of those lines. Measures have to be taken, and a start has already been made, both in the area of augmenting the production of goods and services, and also in the area of regulating personal money income.

A number of deficiencies of the economic mechanism have been preserved to the present time, making it objectively incapable of exerting an influence toward improvement of the situation on the consumer market. They are the absence of the requisite economic incentives for efficient work and the unrestrained growth of the remuneration of work unrelated to the end result of production, and also the detachment we have come to call the group egoism of producers.

Under those conditions, broadening the independence of enterprises in determining their plans and in unrestricted sale of above-plan output has caused a rush to produce superprofitable products at the expense of volume production of goods for the public. Although the plan for the production of consumer goods in retail prices is fulfilled, targets have not been met with respect to the products list, in particular, technically sophisticated products.

Since work collectives are not directly motivated to use with high efficiency resources allocated to funds for

development of production, now that the Law on the State Enterprise has taken effect, resources are being siphoned from those funds into personal income, which has complicated the already disrupted process of social reproduction. In our view, so long as the issues of modernization and expansion of production remain the destiny of a limited group of managers and specialists and no mechanism is created for draining off superprofit that is essentially based on monopoly, the problem of overflow in the channels for the circulation of money will persist.

### Measures To Overcome the Shortage and Normalize the Market

Very important structural shifts in industrial production to the advantage of consumer goods are outlined in the plan for economic and social development in 1990 in order to stabilize the situation on the consumer market through its maximum saturation in coming years. While the overall growth of industrial production is set at 2.6 percent, the growth of production of nonfood commodities should be more than 21 percent.

Major changes in material and technical supply and in increasing the efficiency of utilization of production resources are required to perform these demanding planning tasks. A special approach was taken to furnishing the resources to back up the 1990 plan. When it was being worked out, a reference list of commodities was drawn up, and the requirement for resources was determined by direct tabulation. The share of the state order and this reference list of products on which resources are allocated by direct computation on the basis of rates of consumption per unit of the product was more than 70 percent of the total volume of commodities.

For the first time, resources for the production of goods and services were planned for ministries on a priority basis and on a separate line. Decisions were prepared to supply cotton and wool for the intended production of products of light industry, to expand imports of physical resources, equipment, and finished products to support the plan for consumer goods. At the same time, we cannot exclude either tension in the supply of the resources allocated or the likelihood of their being diverted to other purposes.

It is envisaged that the planned growth of production will be achieved to a considerable extent through accelerated growth of capacity for production of consumer goods and measures aimed at conversion and reconfiguration of enterprises. Even in 1990 the volume of capital investments for these purposes will be 24 percent higher than the plan for 1989 when the total volume of capital investments for the economy will remain stable. In 1990, more than 100 enterprises will undergo this reconfiguration in the branches of the defense complex alone. That complex is to be allocated 2.6 billion rubles of capital investments for development of capacities to produce

commodities, as compared to 400 million in 1988. The main thing is to use the resources allocated with the greatest efficiency.

Of course, the level of assimilation of the resources allocated for the production of goods will depend largely on the efforts of councils of ministers of union republics, which now have jurisdiction not only over enterprises producing 70 percent of the consumer goods, but also construction organizations. It will be good if the plans of construction ministries give priority to reconstruction and building of capacities for production of consumer goods in allocating financial resources from all sources.

In accordance with the government decisions that have been made, the intended growth of the production of consumer goods is also being backed up by a system of incentives for enterprises, their managers, and local authorities.

In the area of taxation, payments into the budget, and pricing:

- the growth of resources for remuneration of labor associated with a growth of production and sale of goods and services for the public will not be subject to progressive taxation;
- enterprises producing nonfood consumer goods, if they have filled the state order, will be allowed to reduce deductions from profit into the state budget as much as 10 percent (depending on the share of the state order in the total volume of production);
- all profit (income) and 30 percent of the turnover tax received from the sale of nonfood consumer goods manufactured over and above the level previously achieved remains at the disposition of enterprises not specializing in that production if that level corresponds to the target of the 5-year plan;
- enterprises are exempted from the charge on assets if they are starting up specialized new capacities for the production of nonfood consumer goods built with their own or borrowed resources;
- supplements to the existing wholesale prices have been established on commodities for children and the elderly so as to guarantee the profitability of their manufacture.

In the domain of remuneration of labor:

- preferential conditions for formation of the remuneration fund have been established for enterprises producing consumer goods (for enterprises not specialized in this production, this is a separate rate for those commodities, while for specialized enterprises this is a rate per ruble of the total volume of output) and additional bonuses (two monthly salaries) are to be paid to supervisory personnel for filling the state order;
- when existing enterprises, production operations, shops, and sections are reconfigured to produce nonfood consumer goods, supervisory personnel and engineering and technical personnel remain in the same remuneration group if the transition to the production of those goods would mean a decrease;

- bonuses to supervisory personnel for the principal results of economic activity are paid on the condition of 100-percent fulfillment of the state order for consumer goods.

As to the use of consumer goods, the following are permitted:

- 50 percent of the growth over the previous year of the production of nonfood consumer goods manufactured by enterprises within their jurisdiction is left at the disposition of councils of ministers of republics (not divided into oblasts) and autonomous republics and kray and oblast soviets of people's deputies for sale to the public;
- enterprises may spend as much as 25 percent of their own funds in convertible currencies to purchase consumer goods;
- barter deals may be made to purchase raw materials, supplies, and equipment for the manufacture of consumer goods on the basis of the sale of products produced over and above the state order, reference figures, and contractual obligations;
- enterprises may spend all foreign exchange proceeds from the export of products over and above the state order, reference figures, and contractual obligations to purchase consumer goods to meet the needs of the work collective.

Thus, the measures which have been adopted encompass a broad arsenal of economic methods of stimulating the growth of production and sale of consumer goods.

At the same time, we have to note that the present tax system, cost-plus prices, and all types of fixed payments and benefits (including those for the production of consumer goods) often motivate our enterprises in the opposite direction from Western firms: preferential taxes and payments result in reduction of the volume of production, while high taxes and payments motivate them to expand production and hire more workers. The same applies fully to prices: as soon as it becomes possible to establish negotiated prices, the volume of production decreases, and conversely, the rigid setting of prices compels a growth of production. It turns out that negotiated prices in the present economic mechanism tend to infringe on the interests of consumers, since they do not have a stimulative effect in terms of a growth of production and improvement of product quality. This is now being referred to as group egoism.

#### **Prospects for Development of the Industrial Consumer Goods Complex in the 13th FYP**

The main task of the first 2 years of the 13th FYP is to reinforce the accelerated growth of the production of goods and paid services for the public outlined for 1990 and on that basis to overcome by the middle of the next 5-year planning period the shortage of all everyday goods, a majority of technically sophisticated goods, and also building materials and lumber and to reduce the volume of deferred unsatisfied demand of the public for goods and services.

In order to perform that task, the volume of production of goods for the public (not including alcoholic beverages) must be increased to 511 billion rubles by 1992 as against 375 billion rubles in 1989 (anticipated estimate), including 334 billion rubles for nonfood commodities, as against 230 billion rubles. Over the next 3 years, that would increase the potential for the production of consumer goods by more than one-third and the production potential for nonfood commodities by almost half.

Performing this large sociopolitical task also calls for appropriate innovative approaches. We need a radical restructuring of management of the economy and above all its investment sphere and scientific-technical sphere. Even at the outset of 1990, in our view, there should be an integrated drafting of programs at all levels of economic activity for construction of new capacities and reconstruction of existing ones for production of consumer goods in the volume envisaged in 1991 and 1992, including the reconfiguration of enterprises in the machinebuilding and defense complexes and other branches in view of the priority development of related production operations and their material and technical supply. It is in those branches, it would seem, that joint stock forms might be used to finance investment projects and scientific-technical projects.

Structural shifts to the advantage of consumer goods have to be backed up with appropriate changes in priorities in the field of R&D carried out by academy science, VUZ science, and branch science. The scientific potential concentrated mostly in numerous branch scientific research institutes must be directed to a greater degree toward raising the technical and technological level of specific enterprises and associations producing goods for the people, which will serve as an important factor for improving their quality and diversity.

In order to speed up these efforts, it would seem advisable to reorient a portion of the capacities of the machinebuilding and defense complexes toward creation of low-power and rapidly adjustable equipment for the production of goods and rendering of services for the public. What is more, even now ministries could make broader use of the opportunities for barter operations to develop small and medium-size enterprises and to obtain appropriate imported machines and equipment on that basis.

Measures to increase the production of consumer goods will have a stabilizing influence on the market only if disproportions are eliminated between the growth of personal money income and expenditures and that income is at the same time linked more closely to the end results of production and the channels for use of personal income are broadened substantially.

The government's program calls for expansion on a paid basis of the limits of personal ownership of housing,

plots of land for weekend cottages, gardens, and orchards, and the attraction of personal resources on a stock-holding basis for various social programs and development of the infrastructure. It is important that the correct tax policy increase the motivation of local authorities to carry out these measures by increasing the share of their budget revenues and earmarked resources to expand construction of housing and other elements of the social infrastructure. Equipment, buildings, and installations should also be used more extensively and labor resources recruited more broadly to render paid services to the public in the areas of health care, education, athletics, tourism, and culture.

In our view, when the law on the uniform tax system is drafted, the government should be given the power to establish temporary taxes on final and intermediate consumption. These taxes have become widespread in world economic practice. The absence of such regulators, which are applied as a function of the developing economic situation, makes it inevitable to use the existing methods for managing and balancing personal income and expenditure in the period when the new economic relations are evolving.

#### **Improvement of Planned Management and Development of the Market Mechanism**

In accordance with the decisions of the Second Congress of People's Deputies of the USSR and the 19th All-Union Party Conference to deepen the economic reform, the transition from predominantly administrative methods to economic methods of management is the general direction in development of the industrial consumer goods complex.

As the market mechanism for economic activity evolves and develops, as social production is democratized further in the direction of broader rights of work collectives, and as numerous extradepartmental enterprises are created—concerns, consortiums, intersector and interregional associations, cooperative enterprises and joint enterprises with foreign capital—the 5-year plan, which will remain the central component in management of the economy must be updated with fundamental changes in its functions, its composition, and the extent to which its indicators are assigned by directive.

In our view, the principal tasks of the new plan would then be as follows in that context:

- first, formation of an elaborate system of indicators (basic indicators and reference figures) that would give direction to the country's economy by determining the directions for dynamic balanced development of the unified national economic complex, and an increase in the rate of achievement of the end result from social production as a whole;
- second, development of economic conditions for the economy's development and accomplishment of specific targets that would make the position of enterprises directly dependent upon their operating efficiency and would give them maximum motivation to

see the reference figures as a guarantee of stable and efficient development;

- third, using the state orders as a means of achieving a guaranteed standard of living for the public and above all those strata of society which are poorly protected in terms of social welfare and have low income.

The restructuring of the activity of USSR Gosplan must also be directed toward accomplishment of these tasks in the state plan, as we see it.

As management of the production of consumer goods and the sphere of paid services to the public improves, the principal functions of USSR Gosplan which might serve as the basis for shaping the new structure of the 5-year plan are as follows.

**Elaboration of the conception for development of the complex.** Performance of this function presupposes determination of the nationwide requirement for consumer goods and the volume of paid services to the public on the basis of an analysis of the level of attainment of the optimum supply to the public for consolidated commodity groups and types of paid services, the optimum consumer budget, requests from the trade sector, the advances of scientific-technical progress, and world economic trends.

Formation of the specific targets of the plan for goods and paid services would be expected not only to balance current personal money income and expenditures, but also to reduce (in 1991 and 1992) and then to eliminate (by 1995) unsatisfied deferred demand. This would be a powerful incentive for increasing efficiency and improving the balance of social production.

**Determination of the directions for structural and investment policy.** Starting from the general goal of national economic planning—ensuring the balanced development of the economy and normalization of social reproduction—further redirection of a portion of the industrial potential from production-technical and military tasks to the production of consumer goods remains an important direction of the upcoming effort at all levels of economic activity.

Simultaneously with a continuation of this effort, there is a need for a more thorough analysis of the scale of the reconfiguration and conversion of enterprises and of the stages and consequences of their realization, since this process affects the foundations of the economy's reproduction.

As disproportions in the economy are eliminated by means of large-scale structural shifts, centralized management will turn to an ever greater degree toward development of the production of fundamentally new consumer goods and paid services, toward supporting the conduct of future-oriented scientific research projects and creation of reserve capacities, and toward solving the nationwide problems of automation, telephonization, and computerization of society.

**Determination of the place of planning and market methods in a unified economic mechanism.** In keeping with the general direction of development of the economic reform, ways and stages have to be worked out for forming the centrally managed and market-oriented sectors of the complex for the production of consumer goods and services. There is a need to delineate the purposes which these two complementary sectors are to serve. In the first stage (1991-1992), it seems to us, centralized management might be given the task of maintaining the production and consumption of the principal commodity groups at the 1990 level. To that end, the volume and structure of the state order would be kept at the level of the base year.

The market mechanism will make it possible to provide additional incentives for the growth of production and the rise of its efficiency outlined for those years. To the end of developing the market, it would seem, the entire growth of commodities in those years (over 1990) must be left at the disposition of work collectives and local authorities. In that way, all enterprises, regardless of their forms of economic activity, will be involved in commodity exchange through the market, and a real basis will emerge for forming new balanced prices.

In that same period, all enterprises producing goods for the population and enterprises related to them must make the conversion to the principles of forming cost-accounting (*khozraschetnyy*) income (profit) without assigned standard rates, must lease unprofitable and underloaded capacities, establish uniform benefits for taxation and credit financing for enterprises which have been steadily increasing the volume of production, expanding the assortment, and increasing the quality of goods for the public and the efficiency of utilization of resources. The normal operation of the market and its interaction with the rest of the economy requires creation of a system of commodity exchanges, and this has already been envisaged by government decisions.

In the second stage (1993-1995), as the consumer market becomes saturated with certain goods, the main task of centralized management will be seen as guaranteeing the **guaranteed subsistence level of the population** and equal conditions for all commodity producers and in forming interrepublic deliveries and union-level stocks on the basis of the state order.

**Elaboration of a strategy for development of interrepublic (interregional) deliveries of consumer goods.** Performance of this function requires a very thorough analysis of the division of labor that has formed in the country and of the causes of nonequivalent exchange between republics (regions). Starting from the goals and functions of centralized planning enumerated above, the set of indicators of the development of the complex for production of consumer goods should be made up, in our view, so as to take into account the following requirements. The basic indicators and reference figures of the state plan set the directions for development of production of consumer goods and the sphere of paid services to the public so as

to take into account the goals and resource capabilities of the entire economy. By the same token, they determine the parameters of dynamic and balanced operation of the economy's consumer goods sector. These indicators must at the same time reflect the conditions and scale of meeting the guaranteed level of the population's consumption and saturation of the consumer sphere.

Accordingly, calculated indicators of activation of production capacities for the production of consumer goods and the corresponding requirement for capital investments coming from all sources of financing and physical resources must have a special place among the principal indicators and reference figures.

The state order for nonfood consumer goods is one of the principal mechanisms for ensuring the guaranteed level of personal consumption. When its volume and composition is being substantiated, consideration must be given to forecasts of consumer demand of various social and income-specific population groups and to the regional and ethnic peculiarities of that demand. That is why the state order, in our view, must be flexible in nature—must increase when the situation becomes acute on the consumer market and decrease as the market is saturated with the particular goods—and should be set mostly in the form of physical indicators. The flexible structure of the state order presupposes the existence of reserve capacities, which is why in the first stage (1991-1992) it is important that it retain the indicators for activation of capacity envisaged for 1990 (representing a volume of production of about 5 million rubles) to be financed from centralized capital investments, and at the request of enterprises—also financed from their own sources. The union republics must in this connection be delegated the right to fix the state order for activation of capacities to produce nonfood consumer goods regardless of the rated capacity of the project.

The same priority and procedure also needs to be preserved in those years for material and technical supply supporting the production of consumer goods.

When the interrepublic breakdown of the plan is being shaped, it is advisable in 1991 and 1992 to envisage as principal indicators the volume of exports and imports of consumer goods in value terms (in wholesale and retail prices) and also for consolidated commodity groups.

The need to introduce as principal indicators the volume of imports and exports of consumer goods in wholesale prices is related to establishing at the state level the guaranteed volumes of commodity exchange ensuring conditions for the self-support of the republics (regions), while the purpose of having them in retail prices is to link cash plans, balances of personal money income and expenditures, financial receipts (taxes and subsidies) to be distributed among the republics in connection with the import and export of goods.

It is advisable to determine as a state order the volume of exports of consumer goods produced at enterprises

under republic jurisdiction—in value terms and for a list of the most important products.

Establishing a state order for consumer goods produced at enterprises under republic jurisdiction and to be exported from the republic, in physical and value terms, will make it possible to restrain development of inflation in republic commodity exchange and at the same time put a limit on the desire of local authorities to fulfill the export plan in physical terms on the basis of lower quality goods than those being delivered to the market within the republic.

The volume of imports into the republic (region) of consumer goods in total value terms and the volume of the principal types of raw materials in physical and value terms should, in our view, become limits.

Adoption of indicators of imports into the republic of consumer goods and the principal raw materials to produce them as limits will make it possible to establish the maximum volume of imports of goods into the republic which the state guarantees and thereby create a stable basis for the entire process of interrepublic interaction and mutual settlements for consumer goods.

The state plan for development of paid services, it would seem, should be formed on the basis of the orders of the union republics, taking into account the structure of effective demand forming on their territory and the availability of production resources.

The principal indicators and reference figures at the level of the national economy must reflect the total sales of paid services to the public and also for certain socially significant, but not sufficiently developed types (everyday services, given separately for rural localities, and services in the sectors of tourism, health care, physical education, and athletics), and also for those types of services which require centrally distributed resources.

The state order for the volume of paid services to the public in the breakdown by union republics, ministries, and departments should be established only for centrally planned types of services (intercity traffic of USSR MPS, USSR MGA, USSR Minmorflot, the services of foreign tourism, etc.). At the same time, the state order of ministries and departments in 1991 and 1992 must include assignments for the production of the most important equipment, technical devices, and replacement parts for enterprises providing everyday services and also for activation of production capacities for rendering everyday services to the public which are to be financed from centralized capital investments.

The approaches and proposals we have set forth can contribute to effective solution of the problems in developing a highly productive and efficient complex for the production of consumer goods.

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## GOODS PRODUCTION, DISTRIBUTION

### Interbranch Concern to Aid Enterprises With Conversion

90UM0449A Leningrad LENINGRADSKAYA PRAVDA  
in Russian 17 Mar 90 p 3

[Interview with Anatoliy Aleksandrovich Turchak, general director of the Leninets TSNPO [Central Scientific Production Association] and president of the Konvent concern, by Ye. Nikolayev: "Concern...for Conversion"]

[Text]

**Is it really easy to remake swords into plowshares?**

**This was the subject of the conversation with Anatoliy Aleksandrovich Turchak, general director of the Leninets TsNPO [Central Scientific Production Association] and president of the Konvent concern for the mutual exchange of scientific-technical achievements between defense and other enterprises of the national economy.**

[Nikolayev] Perhaps it is worthwhile to remember that we have already run into conversion and on a significant scale. The Central State Archives for the national economy have uncovered more than 600 documents classified as "Top Secret" that reflect conversion plans for the postwar period (from 1945 to 1947). We should also remember the "Khrushchev demobilization" at the end of the 1950's and beginning of the 1960's. And now how are we considering the accumulated experience?

[Turchak] Alas, this experience not only has not been taken into account but to a large extent has not even been declassified: the archives maintain strict silence about the thousands of documents involving conversion. And that is too bad. The restructuring of the military industry took place then under conditions similar to those today, when the main problem is essentially the same: just as before, conversion is taking place under the conditions of strict centralization and economic instability. There are no detailed programs and there is no corresponding law.

[Nikolayev] On the other hand, there is the initiative...

[Turchak] When M.S. Gorbachev spoke at the United Nations and invited all countries to shift from an arms economy to a disarmament economy, the idea found the support of most of the states. It was decided to present their national conversion plans to the session of the General Assembly. And this was affirmed in the decree of the Congress of People's Deputies of the USSR. The talk at the congress involved, in particular, the utilization of the resources becoming available from the defense industry for the production of consumer goods and equipment for the light and food industry as well as health care.

[Nikolayev] Anatoliy Aleksandrovich, you mentioned the legislation on conversion. Can it be that this is the way out? Explain the meaning of it.

[Turchak] The Law on Conversion in the USSR is essential and its preparation must begin immediately. Why? All past as well as present experience shows that the planning system does not save us from conversion expenditures, especially when it is not prepared early.

As of today, the United States is the only country in the world where a bill on conversion has been drawn up at the national level and already discussed (by the way, such a bill was first introduced to the U.S. Congress back in 1963 but it did not pass at that time). The bill proposes government responsibility for planning economic conversion in the military sector.

It seems to me that the American version of the draft law could be taken as the basis for the formulation of a Law on Conversion in the USSR. The principles of the planning of conversion are quite similar, as are the principles for the organization of the military-industrial complexes in both countries.

[Nikolayev] You are the president of an essentially new concern, the very name of which indicates its specific purpose. What will this concern do for conversion?

[Turchak] I must once again refer to foreign experience. Right after World War II, in developing new military equipment, the military-industrial complex of the United States began to orient itself toward its second, peaceful purposes. We, unfortunately, did not take this path, although there were attempts in the 1930's to introduce such an ideology into the military industry. Today we are essentially reviving these traditions. Just how is that?

There are two approaches among economists here.

The first is to invest resources addressed to defense in backward branches and production systems. (In my opinion, this is a mistaken point of view, because the gap in the technical level between the defense industry and branches working for city and municipal services is 10 to 20 years). It is simply impossible to apply military technologies without the capital restructuring of "civilian" enterprises.

The second approach, on the basis of market relations, is to turn over adapted versions of technologies capable of finding almost immediate applications in the production of consumer goods. I consider such a path to be the most rational.

Precisely it was the basis of the work of the concern recently established in Leningrad. It is interbranch in nature and the association is quite voluntary. It includes a whole series of research institutes, city VUZ's, LNTs [Leningrad Scientific Center] of the USSR Academy of Sciences, major enterprises and associations. All of them have the corresponding scientific-technical reserve, which can be utilized successfully in civilian production. The concern has its own cost accounting center that helps the enterprises with sets of documentation or even series products.

[Nikolayev] Let us define that more precisely. The concern itself does not sell specific products to city stores but helps the military plants to organize the production of consumer goods themselves. Is that right?

[Turchak] Quite right. We are performing essentially mediating functions between the branches of the defense industry and civilian enterprises taking into account the voluntary nature of the interrelationships and economic interests of both sides. The basis is commercial interest and, in the final analysis, the satisfaction of the consumer interests of citizens for goods.

The main task of the concern is the search, development, approval and introduction of the projects for specific objects of conversion.

[Nikolayev] And how is conversion proceeding in the Leninets TsNPO itself?

[Turchak] Consumer goods have already ceased to be nonspecialized goods for us. This year it is planned to assimilate an additional 12 consumer goods over and above the existing products list. Leninets is also providing technical assistance in the equipping of the special GUVd [Main Administration of Internal Affairs] machines of the Leningrad oblispolkoms for the fight against organized crime.

As you see, the range of conversion is rather broad for one association. In my view, a very important undertaking by Leninets and the concern is their participation in the development of a concept for regional cost accounting. With our specific knowledge of Leningrad and the entire northwest as the "main defense effort" of the country, we hope to make this concept more viable.

### Conversion Success at 'Polet' Missile Engine Plant Noted

90UM0449B Moscow IZVESTIYA in Russian 4 Apr 90 Morning Edition p 1

[Unattributed article: "Fruits of Conversion"]

[Text]

Once they met almost exactly as in the photograph [not reproduced] and decided that their shop No 2 would raise the annual plan for the production of consumer goods by at least 68 times! Prior to the beginning of conversion, the Omsk association "Polet" produced engines for the spacecraft "Buran." Now for the first time they had to manufacture consumer goods valued at R100,000. But the shop itself raised the plan figure to R6.8 million.

It all began with the arrival of a new shop director. Even before that, they had heard about him here. Before then Valeriy Nikolayevich Chuzhikov was able to lead another chronically backward shop out of a difficult situation. With the arrival of Chuzhikov, the new shop coped with the products list target for the first time. And



later in the shop they decided to become an independent subdivision and to open their own bank account.

All that was needed was to untie the hands of the workers, and now the state order is being fulfilled in stable fashion. They are producing fenders for "Zhigulis," mufflers for cars, decorative aluminum slabs and metallic shingles for summer houses.

### Cooperative Role In Consumer Market Questioned

904D0092A Moscow *EKONOMIKA I ZHIZN* in Russian No 5, Jan 90 p 18

[Article by A. Glushetskiy, candidate of economic sciences: "Is Cooperation Saturating the Consumer Market?"]

[Text] With the rebirth of the cooperative movement, definite hope is associated with overcoming the serious disproportion between the monetary income of the population and the availability of goods. However, despite expectations, cooperation has not furnished assistance in overcoming this disproportion. Cooperative enterprise is meeting the mass consumer only half way and is tending towards servicing the needs of enterprises and organizations on an every increasing scale.

This is convincingly borne out by certain facts. During 9 months of 1989, the entire volume of cooperative output increased by a factor of 4.3 and the output sold to the population—by a factor of 1.8. As a result, its proportion compared to the overall volume of cooperative sales during the given period declined by a factor of almost 2.5—from 39 to 16.5 percent. If we take only cooperatives engaged in the production of consumer goods, then in the structure of their commodity turnover the proportion of products sold to the population declined from 39 to 24 and cooperatives for providing domestic services to the population—from 45 to 34 percent.

Of 26 billion rubles' worth of cooperative products sold during three quarters of last year, only 4.3 billion rubles' worth were sold to the population. There was an average of 120 rubles' worth of all types of cooperative goods and services per inhabitant of the country, including that of a consumer nature—20 rubles, and this constitutes 1.3 percent of the overall volume of commodity turnover and paid services (such a ratio continues for a year—1.5 percent).

Let us conduct a simple comparison. After adding 4.3 billion rubles' worth of products to commodity turnover and the sphere of paid services, the cooperatives acquired almost 3 billion rubles' worth of products for cash payments from stores in order to satisfy their own production needs. Thus, from a cost standpoint, the increase in consumer goods and services amounts to only 1.3 billion rubles and perhaps there is no increase on a payment in kind basis. Indeed, it is known that the cooperatives sell products at higher contractual prices and that they make acquisitions at centrally established prices—substantially lower. According to data supplied

by USSR Goskomstat [State Committee on Statistics], the prices for goods sold by cooperatives are roughly higher by a factor of 1.7 than the state retail prices.

There is still one other extremely important circumstance. It would be wrong to perceive the entire volume of cooperative products sold to the population as an addition to that produced earlier by state enterprises. Indeed, the cooperative sector for the most part is increasing rapidly as a result of changes in the cooperatives of existing state enterprises and their subunits. A mass movement is taking place towards the cooperative form for that which has already been produced by state enterprises.

At the same time, the cooperators are increasing the demand for consumer goods and services. During the period under review, the volume of such goods and services reached 10.8 billion rubles' worth—this then was the wage fund computed for the cooperators. The average wage in cooperatives is higher by a factor of 2.2 than that for manual and office workers attached to state enterprises. If based upon the results for 1988, there was 1 ruble and 9 kopecks' worth of consumer goods and services sold by cooperators per ruble of their monetary income, than based upon the results for 1989—40 kopecks' worth.

As you can see, the additional monetary demand for consumer goods and services on the part of the cooperative sector surpasses its contribution to retail commodity turnover and paid services.

These processes led to a situation in which cooperation became a channel for the additional emission of cash funds. The earnings of cooperators during 9 months of 1989 amounted to 26 billion rubles and this consisted of various types of money: "live"—4.3 billion rubles derived from channels for cash monetary circulation, and non-cash—21.7 billion rubles. During this same period, the cooperatives removed from their accounts 13.7 billion rubles in cash. The difference was substantial. And even if it is assumed that the cooperatives deposited in a bank all of the cash funds earned, without having left a considerable portion in their treasuries, the additional emission in the channels of cash monetary circulation in such a case would amount to not less than 9.4 billion rubles, that is, more than 1 billion rubles monthly.

It comes as no surprise to learn that recently there have been more frequent attempts to place the principal responsibility for the galloping inflation upon the cooperatives. We cannot agree with such an opinion. The principal causes of this negative phenomenon are to be found in the state sector, where the scale of monetary emissions is considerably more extensive. But cooperation cannot counter this trend. It also appears to be an inflationary factor, albeit not the principal one.

The cooperative sector, in expanding not as a result of the formation of new cooperatives but rather owing to

changes in the existing state enterprises and their sub-units, differs very little from the state sector in terms of its structure and has begun reproducing its disproportions.

Under conditions in which cooperative enterprise is not promoting a stabilization of the consumer market, it is hardly realistic to expect a reduction in prices for cooperative products sold to the population.

According to data supplied by the "Fakt" Sociological Service, the price coefficient for the cooperative market with respect to state trade, for a comparable range of goods, is roughly 150-200 percent. In particular, outer clothing, transport services, construction carried out on the basis of estimates and computer services—150 percent, footwear and motor vehicle service—150-170, baked goods—200, and costume jewelry—200-300 percent.

Mention should be made of an interesting phenomenon: insufficient demand owing to high prices for consumer goods has an opposite dependence—the prices are high because the demand and sales volume are low. Cooperators attempt to compensate for the low turnover through the use of high prices. The sales are low and the demand remains unsatisfactory. More than 70 percent of the consumers view cooperative goods and services as being inaccessible to them, despite experiencing shortages in many of them.

The failures of cooperation on the consumer goods market are arousing natural dissatisfaction among the population, which is enduring the movement on the whole as the anti-cooperative mood continues to increase.

How should the steps taken by the government with respect to cooperatives be evaluated? It is recalled that as a result of taxation an increase has taken place in the wage fund obtained through the sale of goods and services to the population. This must promote a reorientation of the cooperative economy towards satisfying the interests of the mass consumer. Measures have been undertaken aimed at stabilizing the prices for cooperative products sold to the population. In October 1989, a correction was made to the Law on Cooperation in the USSR authorizing the soviets of people's deputies to establish maximum price (rate) levels for the principal consumer goods and services produced and sold by cooperatives.

It is believed that this statute must become not a restrictive measure but rather a means for flexible regulation. First of all, the soviets are certainly not obligated to establish maximum price levels, but they have the right to do this in those instances when they consider it advisable to do so.

Secondly, maximum price levels can be established not for all consumer goods and services, but only for those for which there is a primary need. Certainly, in handing down a decision of this type, one should have a clear understanding of the consequences involved. For

example, will not a limitation on prices bring about a flow of cooperative goods and services to other territories?

In order to create interest among the cooperators in carrying out operations in a given territory, they should ideally be granted definite advantages: priority allocation of premises, local raw materials and credits. The Baltic republics have chosen to follow a more strict path—they limited the possibilities of their cooperatives exceeding the limits of the republic market: when products are sold beyond the republic's limits, the income tax rates are doubled.

On an increasingly frequent basis, we are encountering statements in the press calling for cooperatives to be deprived of the right to maintain their accounts on a cash basis and for such records to be converted over to a non-cash system of accounts. And in the process, more strict limits are being placed upon the free monetary funds in the cooperative treasuries.

It is our opinion that the effect from such an innovation will be dual in nature. On the one hand, there will be a reduction both in the conversion of non-cash funds into cash and in the flow of goods from the retail trade network for satisfying the production needs of the cooperatives. But on the other hand—additional difficulties are being created in the area of logistical supply. Cooperation will thus strive to an even greater degree to develop the production not of consumer goods but rather products of a production-technical nature.

## HOUSING, PERSONAL SERVICES

### Economic Benefits From More Paid Services Examined

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in Russian No 3, Mar 90 pp 89-93

[Article by Doctor of Economic Sciences T. Koryagina, head of a department at the Scientific Research Economic Institute under the USSR Gosplan, and Candidate of Economic Sciences M. Rossinskiy: "Potential of the Sphere of Paid Services"]

[Text] Free and preferential services rendered at the expense of public consumption funds account for 60 percent of the total volume of services provided for the population. Free (preferential) or paid forms of services carry a certain functional load and the problem of the scale of their development is solved depending on the acuteness of specific social tasks facing society. The selection of conditions for providing services is determined by their public significance. Society is interested primarily in an expansion of services that play a specific role in the formation of an all-around developed man. In this case it is primarily a matter of education, health protection, physical culture, and other services of special social significance, which are provided primarily free of

charge. The wide range of housing and municipal, transport, communication, and public dining services, domestic services for the public, and rest industry and other services is less urgent, although also important from the point of view of society's interests and needs. A significant part of these services is provided to the population on preferential payment terms. For this reason the proportion of payment for services in the population's total expenditures is much lower than in capitalist countries, where a steady tendency toward the growth of the share of services in the population's expenditures has appeared (especially in recent years). Furthermore, prices of services rise there more rapidly than those of consumer goods. A similar situation is also created in most socialist countries: As the level of personal consumption rises, the population's expenditures on paid services increase more rapidly than all of its monetary expenditures and, as a result, the share of paid services in the indicated expenditures rises intensively—at present it makes up 20 to 30 percent.

In principle, in our country paid services, according to the price level, are available to all population strata. Often they are provided with big privileges. For example, the state compensates for almost one-half of the expenditures on transport services. Despite the rise in the cost of travel by city transport in connection with the increase in fuel and energy prices, the fare is one of the lowest in the world. Every passenger trip in a streetcar costs the state 6.2 kopecks, in a trolley bus, 6.6 kopecks, and in a bus, 8 kopecks.

The purposeful and planned development of free or preferential services (in the acquisition of education, health protection, rest organization, and so forth) is one of the most important principles of our social system. However, this does not mean that its use should expand without control and without due regard for specific economic conditions.

Proposals concerning an increase in charges in sectors of the social and cultural complex have often been expressed recently. However, they do not find widespread support among the population, or among scientists, and not without grounds. As already noted, free and preferential services rendered through public consumption funds are intended to meet social and spiritual needs of special importance to society. Therefore, they should remain primarily free so that the needs of all members of society for them are met uniformly, regardless of the family income. This is necessary to ensure the principle of social justice.

At the same time, it is obvious that, as the population's material well-being and cultural level rise, excessive social "guardianship" is no longer as obligatory as during previous years. Furthermore, an expansion of the range of free services can have negative economic and social consequences. In particular, in the sphere of free or preferential services it is very complex to utilize cost-accounting principles (for example, the material incentive system) and this has a negative effect on the quality

and periods of services. The lack of charges often leads to abuses in the distribution of some benefits (possibility of receiving competent medical help, state housing, and so forth). Finally, receipts from public consumption funds, in contrast to wages, have a much less stimulating effect on workers. It is not only a matter of their distribution on an equalitarian basis. These services are not as "tangible" as monetary income and, psychologically, are perceived as "gratuitous" benefits.

Another important circumstance should be added to the above. As is well known, an inflationary process is going on in the country. It is manifested primarily in the shortage of consumer goods and services with an increase in the population's ready cash, which, owing to the poor satisfaction of effective demand, is devalued. A rise in prices and income along an increasingly expanding spiral is the characteristic feature of inflation. Owing to the fact that the sphere of paid services is not developed, when there is a growth of monetary income, the population is forced to assign it for the purchase of consumer goods to a greater extent. This deforms the structure of demand, shifts it to goods, and exerts unnecessary pressure on the retail commodity turnover and on prices, intensifying the already significant unbalance of the mass of commodities and money.

In the economic literature, basically, the problem of balancing supply and demand often boils down only to an increase in the production of modern goods, refinement of their assortment, improvement in their quality, and so forth. At the same time, other questions, which are of no small importance, are not analyzed: What is the role of services in the elimination of tension on the consumer market? How is the demand for paid services regulated? What are the potentials for and economic levers of an increase in their volume? The development of paid services (precisely development and not a rise in their prices) will not only improve the balance of the consumer market, but will also ensure an additional influx of financial resources into the state budget, which is extremely important under the conditions of its deficit.

Of course, there is the problem of determining the permissible limits of charges for services of the social and cultural complex (public health, sports, culture, education, and so forth) with due regard for the dynamically rising monetary income and rapidly (often unpredictably) changing needs. The provision of these services at a socially guaranteed level free of charge, or at preferential rates, should be ensured for every member of society. This principle should not be distorted by departmental, official, or other conditions. Obviously, this matter, which is an important link in social policy, should be the subject of special consideration at the Congress of People's Deputies. Otherwise, as before, it will be solved at an administrative level and often on a subjective basis. With regard to the realization of services for the public in excess of the socially guaranteed minimum, to be sure, they should be provided for a charge. In other words, within the framework of specific

types of services a certain "reorientation" in favor of paid forms is fully possible and advisable. It is primarily a matter of the services of sports, health improving, and cultural complexes. Let these, like many other scarce services presently provided free of charge or on preferential terms, be **legally available** to the population as soon as there is demand for them. The scale of the "shadow" economy of services, which are realized illegally and are not reflected in statistical accounting, indicates that it is quite big. According to our calculations, private individuals annually provide services worth 14 to 16 billion rubles for the public, which makes up approximately one-third of the officially realized consumer demand for services. Even if income connected with speculation or other criminally punishable acts is excluded from this volume, the remaining volume of "illegal" services will total on the order of 10 billion rubles. They must be legalized by creating specific economic conditions for this. Of course, such a process should occur without bureaucratic pressure from outside, objectively, not by transferring traditionally free services into the category of paid services, but, first of all, along the line of expanding the sphere and improving the quality of services for the public.

For example, it is possible to introduce a charge for additional conveniences during the consumption of domestic services (maximum individualization of services, a higher level of comfort, and so forth), or for receiving "above-normative" medical services at patients' wish (second consultation by highly skilled specialists, gerontological, cosmetological, and other "personified" services, and more comfortable accommodations in hospital wards), meeting the needs of individual citizens for additional high-quality specialized education, and so forth. Incidentally, the problem of organizing as part of the polyclinic service a wide network of cost-accounting consultation and diagnosis departments and independent polyclinics, narcological outpatient clinics and offices, cosmetological hospitals and health-improving complexes, and boarding houses for individuals in need of constant care has long been urgent.

Of course, all this will require a new approach to the system of organizing the activity of paid subdivisions forming part of service institutions—to methods of planning, to the provision of incentives for labor, and so forth. An extensive use of various contractual forms, the brigade contract, and leasing is appropriate here.

For now the level of development of paid services, obviously, does not meet present-day requirements. During the 9th, 10th, and 11th Five-Year Plans their share in the total volume of the population's monetary expenditures remained approximately at the level of 10 percent, while the growth of consumption of paid services declined steadily: From 31 percent during the 9th Five-Year Plan to 25 percent during the 10th Five-Year Plan and to 18 percent during the 11th Five-Year Plan.

The measures taken to expand the sphere of paid services for the public have not been quite effective. The system of management and planning in this sphere has not yet been restructured and the organization of material and technical supply, investment, price formation, crediting and financing, and development of new organizational forms of rendering services has not been regulated. After all, only after such a fundamental restructuring of the sphere of paid services, in fact, is it possible to make a "breakthrough" and to attain indicators of the world level and of the rational consumer budget. At present the degree to which the consumption of paid services corresponds to rational norms is the lowest among the basic complexes of consumer benefits. The population's provision with paid services is much lower than the level of satisfaction of needs for free services and material wealth. According to the calculations of the Scientific Research Economic Institute under the USSR Gosplan, the expenditures of the population residing in the RSFSR on paid services in accordance with the rational consumer budget, should total 520 rubles annually per resident. To attain such an indicator, the per-capita volume of paid services should be tripled or quadrupled as compared with the present level (of course, with an improvement in their quality).

There is another, and very significant, aspect of the problem: the lack of an integrated approach to the development of a network of paid service enterprises, the significant territorial nonuniformity in their placement, and, accordingly, the high level of differentiation in the consumption of services throughout regions, between cities and rural areas, and among cities of different sizes. The situation is especially bad in rural areas. Therefore, the population's expenditures on paid services, even with equal income, are much lower there than in cities. Apparently, this also explains the relatively high level of savings in rural families. As a result, the stimulating function of distribution according to labor is weakened. The urgency of this problem intensifies sharply under present conditions in connection with the realization of the agrarian policy developed at the March (1989) Plenum of the CPSU Central Committee.

In order to more fully realize consumer demand, to reduce the unbalance of the population's monetary resources with their commodity coverage, to accelerate the rate of money circulation, and to overcome inflationary processes in the economy, a significant development of the sphere of paid services for the public is envisaged in the very near future. This will also lead to serious qualitative shifts in the entire consumer sector of the economy. In particular, an outstripping growth of the population's expenditures on paid services, as compared with purchases of goods, will be ensured, which will increase the share of expenditures on services in the population's monetary expenditures. It is assumed that during the two forthcoming five-year plans for most types of paid services indicators of the rational consumer budget will be attained on the basis of a significantly expanded scale of services for the public and improvement in their qualitative parameters. Structural changes

will also occur in the service sphere itself (in favor of services paid by the population).

The dynamic development of paid services should also have a significant effect on the reproduction process as a whole (first of all, from the point of view of resource provision). More substantial labor resources and capital investments are needed for an expansion of this sphere than for an equivalent development of consumer goods production. The capital intensiveness of the latter is approximately 24-fold lower than the capital intensiveness of nonproduction services and 170-fold, than that of housing and municipal services. With due regard for full national economic expenditures the differences are even more significant. Such a situation is due, in particular, to existing preferential rates of paid services, which often do not even make up for production costs. It is primarily a matter of services, which account for the population's bigger monetary expenditures, that is, housing and municipal facilities and passenger transport (the proportion of these two sectors makes up about 53 percent in the structure of paid services for the public). At the same time, retail prices of most goods, with the exception of meat and dairy products and vegetables, not only compensate for production costs, but also ensure the derivation of net income.

The need for an increase in labor resources engaged in the service sphere is caused not only by its expansion, but also by an increase in the demands on the quality and standard of services. This is the most important condition for the intensification of its social effectiveness and solution of the following urgent problems: decrease in the load per worker (reduction in the group of patients serviced by a physician, in the number of passengers transported per transport facility, and so forth); expansion of the network of receiving centers and of mobile service sphere facilities for servicing at places of residence, in mass rest zones, and so forth; organization of new service institutions in rural areas, small settlements, and remote, not easily accessible, or newly developed regions.

To be sure, a fuller satisfaction of the population's needs for paid services presupposes a planned redistribution of resources into this sphere. Meanwhile, during many years the growth of the volume of services has been accompanied by a reduction in the proportion of these sectors in resource provision. For example, the share of their nonproductive fixed capital in all the fixed capital of the national economy was lowered from 38 percent in 1970 to 33 percent in 1988 owing to the differences in the rates of growth (during that time productive fixed capital grew 3.3-fold, whereas unproductive, 2.6-fold). This is largely due to the fact that for many years in investment policy priority in the distribution of resources between material production and the service sphere has been given to production sectors. The slowdown in the rates of resource provision for service sectors has affected the dynamics of the volume of paid services and has not made it possible to fundamentally solve problems of raising the quality and standard of

services. The limitation of resources makes the search for potentials for the growth of paid services at the expense of those whose development is not connected with large additional expenditures ever more urgent.

A thought-out investment policy should become the basic direction in resource saving in the sphere of paid services. Enlisting so-called nonspecialized enterprises and organizations of all ministries and departments, regardless of their specialization and nature of basic activity, in the provision of paid services, as well as expanding the material and technical base of the service sphere at the expense of the funds for social and cultural measures of these organizations, can be a big saving potential. For now these resources are still weakly drawn into the economic turnover. This applies equally to the possibilities of cooperative and individual forms of rendering paid services.

The last matter deserves special attention. Under present conditions fundamentally new opportunities have been created for the development and improvement of the most promising cooperative forms of the service sphere. The following are advantages of such forms of activity: elasticity, flexibility, maneuverability, and ability to adapt oneself to the real level of socialization of production and consumption; mobility of organizational and economic structures (service forms, the assortment of goods, the set of services, and so forth) depending on seasonal characteristics, changeability of fashion, and other factors; "orientation" toward the consumer, a direct and mobile connection with the market, and, at the same time, the possibility of promptly maneuvering prices, sales channels, and so forth; extensive possibilities for the introduction of self-financing principles (transition to the leasing contract, remuneration of labor according to final results, and so forth); drawing additional resources into the economic turnover (waste of raw materials and supplies, unutilized capacities of state enterprises, and manpower under conditions of "secondary" employment, which, incidentally, expands the social limits of change of labor, and so forth); direct stimulation of the creative activity of cooperative workers and their initiative and socialist enterprise.

Undoubtedly, the development of cooperative forms makes it possible to ensure a fuller realization of the potential of socialist property, to restore to a certain extent the lost "sense of being the master" among workers, to overcome their alienation from the means of production, to stimulate a proprietary and interested attitude toward the use of resources, as a result, to activate the human factor significantly, and to raise its real capability. It will help to solve another important problem. The state system of domestic services, public dining, hotel management, sports and health-improving institutions, leisure organization, and of other links of the social and domestic infrastructure, which has existed for a number of years, does not manifest flexibility in organizing the satisfaction of consumers' needs and is oriented primarily toward the establishment of "large-scale" enterprises (large complexes, combines, and so

forth). As a result, service sphere facilities lose such qualities, which they need, as maneuverability and consideration of consumers' needs, not to mention the negative economic consequences of such practice (underutilization of capacities). As the experience of many foreign countries shows, service institutions, which are relatively small in size, but close to consumers of services, sensitively react to demand, and value a stable clientele, are more convenient and effective than service sphere institutions, which are bigger, but more distant from the population's places of residence (for example, multistoried "service centers" in big cities). Incidentally, this manifests the peculiarity of operation of the law on production concentration in the service sphere, where the limits of concentration are determined not only by the effect from the reduction of production costs, but also by the saving of the population's time. It is appropriate to recall here Lenin's thesis that the "law of the superiority of large-scale production is not at all as absolute and simple as sometimes people think."<sup>1</sup>

Cooperatives based on a creative and interested approach, business-like initiative, and search for new forms of investment of resources should give a perceptible impetus to the development of the service sphere. The activity of cooperative and individual workers can be built on contractual relations with state and public enterprises and organizations, which in this case will be interested in providing cooperatives with premises under leasing conditions, in renting out equipment to them, and in selling supplies or raw materials at retail prices for cash to them.

It goes without saying that the problem of developing paid services cannot be reduced only to an increase in their total volume. An expansion of their availability, provision of comfortable conditions, development of immediate forms of services and of guaranteed dates for filling orders (with full financial responsibility for failure to meet them), improvement in the standard and quality of service, and so forth are important tasks.

As the population's needs increase and utilization of the achievements of scientific and technical progress in everyday life expands, fundamentally new types and forms of services will arise. Evidently, combined "blocks" of services intended for meeting the population's interrelated needs will appear and the existing sectorial disconnection of trade and service organization will be overcome gradually. This should be taken into consideration when forecasting the development of sectors of the social and domestic infrastructure.

The development of paid services requires a study of consumer demand and its local, national, demographic, seasonal, and other characteristics. At present it is hardly studied and there is no all-around scientifically substantiated system of its forecasting. There is a need for a deeper differentiation of prices of paid services with due regard for their "hierarchy" (of first necessity, ordinary, immediate, and so forth). It is necessary to develop an

appropriate scientific methodology, which is especially urgent in connection with the preparation of radical price formation reform.

Improvement in the economic mechanism in the sphere of paid services is also of great importance. For now it still weakly stimulates an increase in the volumes and improvement of services and does not sufficiently interest nonspecialized enterprises and organizations economically in an expansion of paid services.

In the service sphere there are objective circumstances hampering the introduction of the economic mechanism by analogy, for example, with industry. They include primarily the combination of production and consumption of services in time, small-size service facilities needed in small settlements, and so forth. Therefore, a fundamentally new mechanism of planning and economic incentives should be established in this sector (the complexity of the problem lies in this). During its development it is necessary to envisage a sharp intensification in the role of territorial planning and management of service sphere sectors (on the basis of expanding the economic independence and initiative of enterprises). The functions of central bodies should be concentrated on the determination of strategic directions in the development of the service sphere, establishment of intersectorial proportions, and resource provision for the program for the development of services. It is advisable to formulate planned assignments for sectors of the paid service sphere on a certain territory according to the principle of comprehensive contract plans (order plans). Information on the volumes of and directions in the development of demand for services should serve as the basis for their elaboration. All paid service enterprises and organizations should be transferred to full cost accounting and self-financing. At the same time, it is advisable to differentiate the normatives of formation of the wage fund and profit distribution according to sectors and types of services (in accordance with social priorities in their development) and to envisage an active, purposeful, and effective stimulation of expansion in the volumes and list of services and of improvement in the quality and standard of services.

A scientifically substantiated elaboration of these problems and introduction of the new economic mechanism in the sphere of paid services (certain elements of this mechanism should also be used in free service sectors) are the necessary conditions for the sector's development and for the attainment of high standards in the level and quality of services for the public with minimization of public expenditures and resources.

#### Footnote

1. V. I. Lenin, "Poln. sobr. soch." [Complete Works], Vol 4, p 110.

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## PERSONAL INCOME, SAVINGS

## Personal Income, Savings Data Examined

904D0111A Novosibirsk EKONOMIKA I  
ORGANIZATSIYA PROMYSHLENNOGO  
PROIZVODSTVA (EKO)  
in Russian No 3, 1990 pp 26-31

[Article by Sh. B. Sverdlik, doctor of economic sciences:  
"Savings Horrors"]

[Text] The increase in the differentiation of the population's monetary incomes and savings is an indisputable

fact. In order to assess its consequences and develop realistic measures to neutralize the negative influence on the social temperature of society, it is necessary at least to have an objective picture of the state of affairs. Otherwise we are doomed to jump from the appeal "enrich oneself" to the directive to "dispossess the kulaks."

We will attempt to assess the scope of the differentiation of incomes and savings for individual population groups, relying on known publications and the results of a mini-poll of citizens belonging to various income level groups (tables 1 and 2).

Table 1. Distribution of Population by Total Income as of 1 Jan 89

Groups with Average Per Capita Income, in rubles per month	Average Number		Annual Income		
	Million People	Percent of Total	Per Capita, in rubles	Total	
				Billion rubles (2 X 4)	Percent of Total
1	2	3	4	5	6
Up to 50	8.3	2.9	300	2.5	0.4
50-75	27.7	9.7	810	29.2	5.2
75-100	44.7	15.7	1,050	46.9	8.4
100-125	50.2	17.6	1,350	67.8	12.1
125-150	44.9	15.7	1,650	74.1	13.2
150-175	35.0	12.2	2,010	70.4	12.6
175-200	25.7	9.0	2,250	57.8	10.3
200-250	28.8	10.1	2,700	77.8	13.9
250-300	9.2	3.2	3,300	30.4	5.4
300-350	4.0	1.4	3,900	15.6	2.8
350-400	3.0	1.1	4,500	13.5	2.4
400-500	2.0	0.7	5,400	10.8	1.9
Over 500	2.0	0.7	31,600	63.2	11.4
All population	285.5	100	1,961	560	100

Table 2. Distribution of Population by Savings as of 1 Jan 89

Groups with Average Per Capita Income, in rubles per month	Coefficient of Savings	Savings		
		Per Capita, in rubles	Total	
			Billion Rubles	Percent of Total
Up to 50	0	0	0	0
50-75	0	0	0	0
75-100	0	0	0	0
100-125	0.1	135	6.8	1.5
125-150	0.2	330	14.8	3.4
150-175	0.3	603	21.1	4.8
175-200	0.4	900	23.1	5.3
200-250	0.6	1,620	46.7	10.6
250-300	0.8	2,640	24.3	5.5
300-350	1.2	4,680	18.7	4.3
350-400	1.7	7,650	23.0	5.2
400-500	2.2	11,880	23.8	5.4
Over 500	3.8	118,850	237.7	54.0
All population	0.8	1,541	440	100



The data in Table 1 in the first three columns of the first eight rows was adopted from PRAVITELSTVENNYY VESTNIK No 17, 1989, page 12. In this publication, the breakdown of the population ends with the group "Over 250." Its disaggregation in columns 1, 2, and 3 was done according to data on the distribution of workers and employees by wages, published in PRAVITELSTVENNYY VESTNIK No 21, 1989, page 21, and also based on information from B.I. Gostev that 3.4 percent of workers receive more than 500 rubles per month.

According to comments by the USSR State Committee for Statistics [Goskomstat], the total income of the population is the sum of monetary and in kind (in a monetary estimate) of incomes from the public and private economy, and also payments and benefits from social consumption funds. Monetary incomes of the population in 1988 were approximately 493 billion rubles; free education, health, and physical education services were 67 billion rubles. This estimate does not take into account all income of the population from the private economy, but only that part which through buying and selling was transformed into cash and was included in monetary income.

The average per capita annual income for the interval groups is calculated as half the sum of the minimum and maximum income (multiplied by 12 months). Using these data and the population number in the group, we receive the annual income for the group as a whole. We deduct from the total income of the population the sum of the incomes of all interval groups and obtain the income of the last group with an average per capita income over 500 rubles per month.

As of the end of 1988, institutions of the State Workers' Savings and Credit Bank [Sberbank] had on deposit about 300 billion rubles, at least one-third of this amount in citizens' "circulating cash," and another 40 billion rubles in premium bonds, certificates, individual insurance policies, and so forth, that is, a total of approximately 400 billion rubles. We will tentatively call the ratio of savings and annual income the coefficient of savings (column 7). (Tentatively because the ratio of the increase of savings and annual income is usually called the coefficient of savings.) The distribution of this coefficient by interval groups is done purely heuristically according to the results of a survey of a small group of friends. This is the most vulnerable spot in our calculations, but we have nothing else. We would be happy if the USSR Goskomstat would make public its data. However, even given the quite approximate nature of our calculations, they provide grounds for certain conclusions.

First of all, 98.6 percent of the population have savings, with which it is clearly unfair to use extreme measures to combat, which some hotheads propose. According to the average amount of the coefficient of savings and the coefficients of the population groups with income under 400 rubles per month, our country is far behind the developed countries of the West and East.

Second, if we talk about ways to remove surplus savings from circulation, this obviously should apply only to the group with average per capita savings of over 100,000 rubles. Unfortunately, we do not have any information for disaggregation of this group by amounts of savings (perhaps the USSR Goskomstat will do this?). But it is obvious that this group includes citizens with savings, say, in the range of 15,000 rubles (which in today's conditions of inflation, the threat of unemployment, the aging of society, and so forth, is not so much for a person's social protection) and "millionaires," about which our mass media writes and talks with such a hullabaloo.

As can be seen from Table 2, this group is very small, only 0.7 percent of the population.

The question arises: Is it worth it, for the sake of removing the excess savings of such a small group of the population, to implement currency reform which inevitably would affect the entire population, all available money, and all savings—both involving and not involving cash?

The experience of postwar reform shows that this is a costly measure (printing new currency notes, exchange, removal and destruction of old currency, transportation costs, security, and so forth). It costs approximately 10 percent of the total sum of the mass of currency in circulation. You must add to this costs for revaluation of the population's deposits and money in bank accounts, reissuance of all price lists, tariff handbooks, and so forth. The holders of large savings will find thousands of ways to avoid reducing their wealth. They include both trivial methods such as dividing their savings among "poor" relatives and friends, which is particularly convenient with anonymous savings (bonds, certificates, and so forth), as well as more or less refined methods such as, say, investing in stock and shares of cooperatives, joint stock companies, and even state enterprises. The author of the article was personally involved in implementing the currency reform of 1947, and is familiar with these and many other loopholes not through hearsay.

Any currency reform undermines the population's trust in the authorities, even when it is implemented at the demand of the population.

The main conclusions from examining the table presented is the following: the current unprecedented imbalance in the market is fed not by excessive savings, but by stagnation of the production of massive goods and services. It is disguised by irresponsible statements and unsupported statements by even high-ranking individuals, not to mention speakers at rallies. The fantastic number of millionaires and near-millionaires is a myth. We should not expropriate, we should set up mass production of quality goods and services intended for people with various levels of income.



Apparently, for each population group we need to find the key that can free the excess savings from imprisonment and put them into circulation with benefit for their owners and society as a whole.

As far as the legitimate millionaires are concerned, they should be given the opportunity to spend their free money on prestigious measures: buying currency at auctions, pictures and other works of art, for charitable purposes like building streets, schools, nurseries, hospitals, homes for the elderly, residential homes, and so forth bearing their names.

Emotions should not take the upper hand over calculations. Here is by no means the saddest example of rash actions.

A year has passed since the 2 December 1988 USSR Council of Ministers resolution On the Sale to Citizens as Personal Property Apartments in Buildings of the State and Public Housing Fund came out. The result is close to zero. One can object that almost 6 months (in Moscow) of this period went to preparing the appropriate documents. Then let us ponder the quality of the decision not supported either by documents or by preliminary preparation. The author is confident that hoping for widespread involvement of the population's funds in housing in this case is another stillborn idea. A person who has a lot of money already has a good apartment. The people who need apartments are those who do not have the money to acquire them. And that's all! In the United States and other countries, individual home construction is stimulated by the state with an extensive system of preferential financing for average and low-income sections of the population.

**Table 3. Population's Deposits in the USSR Sberbank at the End of 1988\***

Index	Number of Deposits		Amount of Deposits		Average Size of Deposit, in rubles
	in thousands	percent of total	in millions of rubles	percent of total	
Total	196,007	100.0	296,696.7	100.0	1,514
Including, in thousands of rubles:					
under 0.3	65,378	33.3	7,392.8	2.4	113
from 0.3 to 1.0	44,801	22.9	28,752.8	9.7	642
from 1.0 to 2.5	48,161	24.6	75,240.2	25.4	1,562
from 2.5 to 5.0	24,320	12.4	82,322.3	27.8	3,385
from 5.0 to 10.0	11,138	5.7	72,793.0	24.5	6,536
from 10.0 to 25.0	2,155	1.1	28,348.3	9.6	13,155
from 25.0 to 50.0	51	0.03	1,629.3	0.5	31,947
over 50	3	0.002	217.9	0.1	72,967

\*USSR Goskomstat, "Finansy SSSR. Statisticheskii sbornik (1987-1988)." [USSR Finances. A Statistical Handbook (1987-1988).]

In conclusion, we will present another table. We calculated the last column in it. The reader himself can compare the data in this table with our calculations and draw the appropriate conclusions.

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### Salary Scales for Ukrainian CP Personnel, Others Published

90UN1138A Kiev PRAVDA UKRAINY in Russian  
14 Feb 90 p 3

[Interview with Konstantin Konstantinovich Prodan, business manager of the Ukrainian Communist Party Central Committee, by an unnamed RATAU correspondent; time, date, and place of interview not given: "What Are the Salaries of Ukrainian Party Organ Workers?"]

[Text] *"Today we know how much M.S. Gorbachev receives per month. But how much does the first secretary of an oblast party committee or a rayon party committee receive...and all of the others who are at the lower levels of our administrative hierarchy?"*

*"I am sure that the many publications which receive RATAU news will gladly publish this material."* (From a letter to RATAU from V. Pokotilo, editor of the Globinskiy Rayon newspaper ZORYA KOMUNIZMU of Poltava Oblast.)

Because of this letter, a RATAU correspondent asked K.K. Prodan, business manager of the Ukrainian Communist Party Central Committee, to answer a number of questions.

[Correspondent] Konstantin Konstantinovich, please comment on what brought about the salary increase for party apparatus workers.

[Prodan] As you know, in accordance with directives from the 19th All-Union Party Conference and the July 1988 CPSU Central Committee Plenum on radical perestroika of the nature and methods of party committees' work, it was considered advisable to strengthen the committees with authoritative, well-trained workers having the necessary life and political experience and capable of successfully and creatively bringing the perestroika cause to fruition. However, the recruiting of such personnel was seriously hindered by party worker pay levels' being lower than the salary levels for enterprise and organization managers and specialists. Disproportions in the pay of party workers and personnel in the production sphere had grown even greater because of the establishment of new tariff schedules and position salaries in the national economy's production sectors in accordance with CPSU Central Committee, USSR Council of Ministers, and All-Union Central Council of Trade Unions [VTsSPS] Order No 1115 of 17 September 1986.

After thorough study of this matter in the CPSU Central Committee, a decision was made to establish position salaries at the levels of the corresponding worker categories in the national economy sector for party committee workers as of 1 October 1989.

[Correspondent] And what, for example, are the salary scales now for the various categories of officials in the oblast, city, and rayon party committees?

[Prodan] The salaries of oblast, city, and rayon party committee workers are set with respect to the party committee's category level, and, per month, are:

Oblast party committee [obkom] first secretaries—750 to 850 rubles.

Obkom department heads—500 to 600 rubles.

Obkom instructors—330 to 400 rubles.

City party committee [gorkom] and rayon party committee [raykom] first secretaries—500 to 600 rubles.

Gorkom and raykom instructors—280 to 350 rubles.

[Correspondent] In order to dot the "i," as they say, let us also give the position salaries for the Ukrainian Communist Party Central Committee apparatus' workers.

[Prodan] The salary scales for the Ukrainian Communist Party Central Committee today are described by the following data:

Central Committee Secretaries—870 rubles.

Central Committee Department Heads—650 to 700 rubles.

Central Committee Instructors—400 to 500 rubles.

[Correspondent] What, for example, is the approximate relation of party workers' salaries now to managers' salaries in the various management elements in industry?

[Prodan] Establishment of the new position salaries for party workers has made it possible to bring their salaries closer to the salaries of the national economy's managers and specialists. In confirmation of this, I can cite the following average data for 1989 on the monthly managers' salaries of 10 city of Kiev enterprises—the production associations imeni Korolev, "Kommunist," imeni Artem, "Radiozavod," and "Arsenal," the scientific production associations "Rele i avtomatiki" [Relays and Automatics] and "Bolshevik," the shoe production association "Kiev," the construction association "Glavkievgorstroy," and Construction and Installation Trust No 1:

Enterprise and organization managers—1,125 rubles.

Enterprise and organization deputy managers—836 rubles.

Heads of departments, shops, and sectors—646 rubles.

Foremen and straw bosses—421 rubles.

[Correspondent] And what are the salaries on kolkhozes and sovkhozes?

[Prodan] Analysis of the salaries on profitable kolkhozes and sovkhozes in Dnepropetrovsk, Donetsk, and Kharkov Oblasts shows, for example, that they are, on the average, from 440 to 725 rubles for the managers and chief specialists, from 310 to 360 rubles for division and animal-husbandry section supervisors, and from 240 to 340 rubles for equipment operators, milkers, and livestock keepers. At the same time, the average salary for the managers of highly profitable farms reaches 900 to 1,100 rubles per month and more.

[Correspondent] Konstantin Konstantinovich, some USSR People's Deputies, creative workers, and cultural and scientific workers are now criticizing the party organs for excessively high salary scales. Do you not have some information about the salaries of these?

[Prodan] Of course we have such information, but I consider it unethical to name the comrades. However, I wish to stress with complete authority that the average monthly earnings of many workers in that category substantially exceed the salary levels in the party organs.

[Correspondent] Finally, here is the last question. At the expense of what funds was the salary increase for party workers effected?

[Prodan] The salary increase was effected at the expense of funds in the party budget. The funds that were freed as a result of the apparatus reduction brought about by reorganizing the party committees were channeled into coverage of the expenditures associated with the salary increase. The apparatus of Ukrainian Communist Party Central Committee officials, for example, was reduced by more than 30 percent, and that of the obkoms by 27 percent. The Ukrainian Communist Party's party budget is based on the principles of full cost accounting [khozyaystvennyy raschet].

My point of view on the salary increase for party committee workers is this: The issue should have been resolved simultaneously with establishment of the new tariff schedules and position salaries for the national economy's production sector workers. As a last resort, the party committee workers' new position salaries should have been established at the end of 1988—simultaneously with the party organs' reorganization.

## CIVIL AVIATION

### New Civil Aviation Minister Interviewed

904H0193A Moscow VOZDUSHNYY TRANSPORT  
in Russian 21 Apr 90 p 3

[Interview with Boris Yegorovich Panyukov, minister of civil aviation, by VOZDUSHNYY TRANSPORT correspondent V. Karpiy: "The New Minister: His First Day"]

[Text] The decision by President M. S. Gorbachev to appoint B. Ye. Panyukov as USSR minister of civil aviation was published in VOZDUSHNYY TRANSPORT on Thursday, 19 April. Our correspondent V. Karpiy met and interviewed the new minister on that same day.

[Karpiy] Boris Yegorovich, Today is your first day in the new post. How is it turning out?

[Panyukov] At 0700 I left my home at Vnukovo for the Ministry of the Aviation Industry. There we reviewed the problems related to the testing of the Il-96, the Tu-204, and the Il-114. Taking part in this analysis were Ministry of the Aviation Industry managers; general designers; V. Gorlov, A. Aksenov, and V. Kurilo, deputy ministers of civil aviation; managers of our NII [scientific research institute], and a number of other interested persons. The principal question was how to speed up operational testing of the new aircraft so that we can begin passenger flights with the Il-96 and the Tu-204 at the end of this year. I must say that this meeting was very intensive in nature, since the situation with our current fleet of aircraft is far from ideal and a number of types of aircraft have to be replaced.

I returned to the ministry and signed a number of documents... But the day is far from over...

[Karpiy] Unless I am mistaken, this is the first time in several decades that a person who is not a pilot has been named minister of civil aviation. Has the tradition been broken?

[Panyukov] I don't think so. The head of the Ministry of Civil Aviation should be an aviation specialist: a pilot, an engineer, a traffic controller, and so forth, who possesses not only aviation knowledge, but who has good organizational capabilities, with competence in the basics of flying work, the ground services, the economy of an aviation enterprise, and the like. But without such experience, without thorough knowledge of the many areas of aviation work now, when questions of an organizational and economic nature are being advanced to the forefront, it is hard for a manager of any rank to count on success.

[Karpiy] As far as I know, all your life has been connected with civil aviation, and the experience you have accumulated—both in amount and the breadth of the "spectrum"—is extensive...

[Panyukov] Yes, I completed the Yegoryevsk Aviation Technical School, I have worked as an aircraft technician, the deputy chief of an LERM [line operations repair shop] (now an ATB [aircraft maintenance base]), the deputy chief of an airport, the commander of an OAO [unified aviation detachment], and I was an Aeroflot representative abroad... I graduated from the Civil Aviation Academy. Working in the Ministry of Civil Aviation, I was concerned with passenger transportation... So I am familiar with many aspects of the sector's work firsthand, as they say. But this is not only my experience—it was passed on to me by many people, who are veterans and experienced specialists. I would like to take advantage of the occasion to thank all those persons who helped at one time in my development.

[Karpiy] You have been the first deputy minister for many years. What is the most difficult thing about this position?

[Panyukov] The first deputy minister has a tremendous amount of work, beginning with coordination of the daily routine production work of the sector and its territorial administrations and ending with management of the ministry staff. Figuratively speaking, the minister deals with strategic matters and the first deputy is concerned with the tactics. And I can assure you that this requires a wholehearted effort from a person; he often has to deal with problems that are completely unexpected in a critically short period of time—our sector is the one that is the most mobile. But I cannot single out what is the most difficult in this position. Any work, if you devote yourself to it, is difficult, but then it also brings you the satisfaction that you can...

[Karpiy] You are taking over the sector during a very complicated period in its development. I realize that I am getting ahead somewhat with this question; nevertheless, do you have a program to regenerate civil aviation and bring it out of the difficult situation in which it finds itself now?

[Panyukov] Unfortunately, our sector is experiencing all those same problems and negative manifestations which have affected our entire national economy. How do we combat them? We have such a program, and we have familiarized the USSR people's deputies with it. We are taking it as the basis, the concepts and ideology for the 13th Five-Year Plan are now being worked out, and we are examining the problems related to the conversion.

As far as my views on the priority directions in this work are concerned, I would single out first of all the solution of aviators' social problems and improvement of their working and living conditions and housing. And this is possible with perestroika of the sector's economy and when the airplane and helicopter fleet is brought up to date and ground facilities are fundamentally improved. The personnel question is a very critical one... But the question you asked is so broad that I think it will be correct if we return to it a little later and discuss it more thoroughly.

[Karpiy] There are quite a few undertakings in the sector now to reorganize it, and new formations and public organizations are emerging. How do you view these processes?

[Panyukov] Unequivocally. The managers in the ministry and locally cannot disregard these processes. We must look for what is positive in them, what can move the sector forward; we must bring what is best into the work, what the new formations and our associations of cockpit personnel, and controllers, and working groups are suggesting as well... I am in favor of collaboration and interaction with those to whom the honor of civil aviation is dear, the persons who devote all their efforts and knowledge for the good of our work. We must raise Aeroflot's prestige, and we can do this only by our common efforts...

[Karpiy] And a final question, Boris Yegorovich: how does your family regard your new assignment?

[Panyukov] With a feeling of ambivalence, it seems to me. They have congratulated me, of course, but... I understand those close to me—they have not seen me as much as they and I would have liked thus far, and now we will see each other even less, because the minister's work day has no limits, generally speaking.

[Karpiy] Thank you for the interview, and we wish you success in your new work.

[Panyukov] Thank you.

It appears that this was the first interview I've ever had with the continuous ringing of telephones. We were interrupted after almost every sentence. Well, congratulations are pleasant, but there were almost three business calls for each one of them...

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